No. 09-1533

In the Supreme Court of the United States

FRANTZ DEPIERRE, PETITIONER

v.

UNITED STATES OF AMERICA

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

BRIEF FOR THE UNITED STATES

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QUESTION PRESENTED

Petitioner distributed more than 50 grams of a substance that was chemically identified as containing cocaine base. The question presented is whether petitioner was correctly sentenced to a mandatory minimum ten-year term of imprisonment under 21 U.S.C. 841(b)(1)(A)(iii), which at the relevant time applied when a defendant distributed "50 grams or more of a mixture or substance * * * which contains cocaine base."

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OPINION BELOW

The opinion of the court of appeals (Pet. App. 1a-12a) is reported at 599 F.3d 25.

JURISDICTION

The judgment of the court of appeals was entered on March 17, 2010. The petition for a writ of certiorari was filed on June 15, 2010, and was granted on October 12, 2010. The jurisdiction of this Court rests on 28 U.S.C. 1254(1).

STATUTORY PROVISIONS INVOLVED

The relevant statutory provisions are reprinted in an appendix to this brief. App., *infra*, 1a-15a.[1]

[1] The appendix includes the versions of the statutes that were in effect during the time period at issue here. See note 7, *infra*.

STATEMENT

Following a jury trial in the United States District Court for the District of Massachusetts, petitioner was convicted of distribution of powder cocaine, in violation of 21 U.S.C. 841(a)(1), and distribution of 50 grams or more of cocaine base, in violation of 21 U.S.C. 841(a)(1) and 841(b)(1)(A)(iii). Pet. App. 1a. Petitioner also pleaded guilty before trial to possession of a firearm with an obliterated serial number, in violation of 18 U.S.C. 922(k). Pet. App. 2a-3a. He was sentenced to 120 months of imprisonment, to be followed by five years of supervised release. *Id.* at 1a, 15a; C.A. App. 25-26, 28.

Petitioner appealed, contending that his sentence was infirm because Section 841(b)(1)(A)(iii)'s reference to "cocaine base" does not embrace all cocaine classified chemically as a base but instead is limited to "crack," a street name for one particular form of cocaine base. The court of appeals affirmed. Pet. App. 1a-12a. It held that Congress's reference to "cocaine base" refers to the chemically basic form of cocaine and is not limited to "crack." *Id.* at 10a.

1. a. The Controlled Substances Act (CSA or Act), 21 U.S.C. 801 *et seq.*, establishes a comprehensive scheme for regulating controlled substances, both those substances used for legitimate medical purposes and those used for illicit purposes. See *Gonzalez* v. *Raich*, 545 U.S. 1, 10-14 (2005). The CSA makes it unlawful to manufacture, distribute, dispense, or possess a controlled substance except as authorized by its terms. See 21 U.S.C. 841(a)(1), 844(a). Penalties for violating the CSA generally depend upon the nature and amount of the controlled substance involved in the offense. See, *e.g.*, 21 U.S.C. 841(b) (2006 & Supp. III 2009), 844(a).

The CSA identifies the substances it regulates on a series of five schedules established by Congress. 21 U.S.C. 812(c).[2] The placement of a drug on a particular schedule depends upon its potential for abuse and for safe, medically accepted use. 21 U.S.C. 812(b). Those drugs with the greatest potential for abuse and no accepted safe medical use are listed on Schedule I. 21 U.S.C. 812(b)(1). Substances generally are identified on the schedules using their chemical name or, if they are plants, the common or scientific name of the plant. The schedules do not use street names or slang to identify controlled substances. Thus, the CSA identifies controlled substances such as "flunitrazepam";[3] "methamphetamine";[4] "heroin";[5] and "marihuana," including "all parts of the plant Cannabis sativa L."[6]—but does not use terms like "roofies," "meth," "smack," or "weed."

b. This case concerns cocaine-related substances, which are classified on Schedule II of the CSA. That classification reflects their high potential for abuse and severe risk of physical or psychological dependence, notwithstanding an accepted medical use. 21 U.S.C. 812(c) Sched. II(a)(4); see 21 U.S.C. 812(b)(2).

When an individual distributes a cocaine-related substance in violation of the CSA, the applicable penalty depends on the amount and particular chemical form of the substance. For any offense involving a designated

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[2] Congress also gave the Attorney General the authority to add drugs to the schedules in certain circumstances. See 21 U.S.C. 811.

[3] 21 U.S.C. 841(g)(2)(A)(iii).

[4] 21 U.S.C. 812(c) Sched. II(c).

[5] 21 U.S.C. 812(c) Sched. I(b)(10).

[6] 21 U.S.C. 802(16), 812(c) Sched. I(c)(10).

cocaine-related substance, the CSA authorizes a sentence of imprisonment up to 20 years. 21 U.S.C. 841(b)(1)(C). As relevant here, at the time of petitioner's offense conduct, conviction, and sentencing, a defendant who committed an offense involving five kilograms or more of a mixture or substance containing a detectable amount of "coca leaves," "cocaine, its salts, optical and geometric isomers, and salts of isomers," or "ecgonine, its derivatives, their salts, isomers, and salts of isomers," was subject to a sentence of ten years to life imprisonment. 21 U.S.C. 841(b)(1)(A)(ii). The same sentence applied to a defendant who committed an offense involving 50 grams or more of "a mixture or substance described in clause (ii) which contains cocaine base." 21 U.S.C. 841(b)(1)(A)(iii).[7] Thus, determining the applicable penalty in this case requires an understanding of the different chemical forms of the cocaine-related substances listed in the statute.

2. Cocaine is a powerful anesthetic and stimulant extracted from the leaves of certain plants of the genus *Erythroxylum*, generally known as coca plants, which are indigenous to the Andes Mountains of South America. John F. Casale & R.F.X. Klein, *Illicit Production of Cocaine*, 5 Forensic Sci. Rev. 95, 96-97 (1993) (Casale & Klein); Drug Enforcement Admin. (DEA), U.S. Dep't of Justice, *Coca Cultivation and Cocaine Processing: An Overview* 1 (Sept. 1993) (*Processing Overview*).

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[7] Congress recently passed legislation amending Section 841(b)(1)(A)(iii) to require 280 grams of cocaine base (as opposed to 50 grams) to trigger the ten-year mandatory minimum sentence. See Fair Sentencing Act of 2010, Pub. L. No. 111-220, § 2(a), 124 Stat. 2372. This brief refers to the version of Section 841(b) that was in effect at the time of petitioner's offense, conviction, and sentencing.

Coca leaves must be processed or combined with other substances to have physical effects on a user. Casale & Klein 98-100; see *United States* v. *Higgins*, 557 F.3d 381, 393 (6th Cir.), cert. denied, 130 S. Ct. 817 (2009). For example, coca leaves can be chewed along with another substance (such as lime) to produce a long-lasting, low-grade euphoria; the leaves have been used in this fashion in South America for more than 3000 years. Casale & Klein 97; United States Sentencing Comm'n, *Special Report to the Congress: Cocaine and Federal Sentencing Policy* 11, 16 (1995) (*1995 Commission Report*).

In recent decades, coca leaves have been processed into usable forms of cocaine through a multi-step chemical process that initially results in a gummy yellowish solid known as coca paste. Casale & Klein 98-101; *Processing Overview* 8-10; *Higgins*, 557 F.3d at 393. Coca paste is then refined by further chemical processing and ultimately converted into powder cocaine. Casale & Klein 101-102; *1995 Commission Report* 63, 66. Some powder cocaine is processed further into solid substances such as "freebase" or "crack." The chemical composition of these substances—coca paste, powder cocaine, "freebase," and "crack"—dictates the drugs' physical properties and the ways in which they can be used.

a. Although the word "cocaine" is commonly used to refer to a number of different forms of the drug, in chemical terms, "cocaine" has a very specific meaning. It is a molecule with the chemical formula $C_{17}H_{21}NO_4$ which represents a structural composition of seventeen carbon atoms, twenty-one hydrogen atoms, one nitrogen atom, and four oxygen atoms. See *The Merck Index:*

An Encyclopedia of Chemicals, Drugs, and Biologicals 2455, at 412 (14th ed. 2006) (*Merck Index*).[8] One important chemical property of cocaine is that it is a base. *Ibid.* That means cocaine can donate an electron pair to another molecule in a chemical reaction and will react with an acid to form a salt. See *ibid.*; *Webster's Third New International Dictionary of the English Language* 180 (1993) (*Webster's Third*) (defining "base" as "a compound (as lime, ammonia, a caustic alkali, or an alkaloid) capable of reacting with an acid to form a salt"); *United States* v. *Robinson*, 144 F.3d 104, 108 (1st Cir. 1998); Physicians & Scientists Amicus Br. 8.

Cocaine base has certain physical properties that result from its chemical structure. Cocaine base is a solid at room temperature. See *Merck Index* 2455, at 412. It is effectively insoluble in water, *ibid.*, and for that reason, it cannot be administered either by intravenous injection or by insufflation ("snorting" through the nose). See *United States* v. *Brisbane*, 367 F.3d 910, 911 (D.C. Cir.), cert. denied, 543 U.S. 938 (2004). But cocaine base can be "smoked," meaning vaporized and inhaled by the user. *1995 Commission Report* 12-14; see *Merck Index* 2455, at 412.[9]

Cocaine base is often reacted with hydrochloric acid to form cocaine hydrochloride. In that reaction, the

[8] The chemical structure of cocaine is shown in the amicus brief. See Physicians & Scientists Amicus Br. 8.

[9] Although the practice of vaporizing and inhaling cocaine base is colloquially referred to as "smoking," that is a misnomer, because "smoking implies that the substance is burned and the smoke from the burning substance is inhaled," and cocaine base that is smoked is not burned but is "vaporized, much like water is vaporized when it boils, and the cocaine-laden vapor is inhaled into the lungs." *1995 Commission Report* 12 n.28.

base donates its free electron pair to the acid and forms a salt. Casale & Klein 101-102; *1995 Commission Report* 12; see Physicians & Scientists Amicus Br. 8-9. Cocaine hydrochloride has the chemical formula $C_{17}H_{21}NO_4 \cdot HCl$ and a chemical structure comprised of seventeen carbon atoms, twenty-two hydrogen atoms, one nitrogen atom, four oxygen atoms, and one chlorine atom. See *Merck Index* 2455, at 413; *1995 Commission Report* 12.[10]

Cocaine hydrochloride often exists as a white or off-white powder. Unlike cocaine base, cocaine hydrochloride readily dissolves in water, see *Merck Index* 2455, at 413, and so it can be injected or insufflated. See, *e.g.*, *Higgins*, 557 F.3d at 393. Cocaine hydrochloride cannot be vaporized and inhaled, however, because it begins to decompose at its vaporization point, becoming "inactive pharmacologically and no longer produc[ing] any physiological or psychotropic effects." *1995 Commission Report* 12-13.

b. The chemical reaction converting cocaine base to a cocaine salt—and vice versa—is used at several points during the cocaine production and distribution process.

That process typically begins with macerating wet coca leaves with lime (a base) to extract cocaine base. An organic solvent (such as kerosene or gasoline) is added, and the cocaine base dissolves into the organic solvent. See Casale & Klein 98. The coca leaves are removed, and an acid and water are added to form a cocaine salt. *Id.* at 98-99. Then lime or another base is added to form cocaine base, which appears as a gummy yellowish solid known as "coca paste." *Ibid.* Coca paste

[10] The chemical structure of cocaine hydrochloride is shown in the amicus brief. See Physicians & Scientists Amicus Br. 9.

is "smoked" in some South American countries and was used in that manner in certain cities in the United States during the early 1980s. *1995 Commission Report* 11-12.

A great majority of coca paste, however, is processed further and is ultimately converted into the hydrochloride salt, that is, the powder form. That process involves adding hydrochloric acid to the cocaine base (dissolved in an organic solvent) to produce cocaine hydrochloride. United States Sentencing Comm'n, *Report to the Congress: Cocaine and Federal Sentencing Policy* 62 (2007) (*2007 Commission Report*). The cocaine hydrochloride precipitates (solidifies) out of the solution and is dried to yield cocaine hydrochloride powder. *Ibid.* Most cocaine that enters the United States is in the powder form. See *1995 Commission Report* 63, 66.

Cocaine hydrochloride is often processed further to appeal to users who wish to smoke it, rather than inject or insufflate it. This is accomplished by reacting cocaine hydrochloride with a base, thereby converting it back to cocaine base. One processing technique for the conversion is colloquially known as "freebasing." *1995 Commission Report* 13; *Higgins*, 557 F.3d at 393. This method involves dissolving cocaine hydrochloride powder in water, adding a base such as ammonia, and then adding ether. The cocaine hydrochloride reacts with the base to yield cocaine base and other substances; the base dissolves in the ether, which is separated from the water; and then the ether is evaporated off and the cocaine base is dried so it can be smoked. The resulting product is colloquially known as "freebase" or "freebase cocaine." See, *e.g.*, *United States* v. *Edwards*, 397 F.3d 570, 574 (7th Cir. 2005). Cocaine base prepared in this way was used by "ten to 20 percent of the cocaine-abus-

ing population" in the 1970s, *1995 Commission Report* 13, but it has declined in popularity because the preparation process is somewhat complex and quite dangerous. Ether is highly volatile, and it will "ignite or explode if the freebase cocaine is smoked before the ether has evaporated entirely"—as famously demonstrated in 1980 when the comedian Richard Pryor suffered severe burns while "freebasing" cocaine. *Ibid.*

Another processing technique for converting cocaine hydrochloride back into cocaine base is known colloquially as "cooking" powder cocaine into "crack." In that process, cocaine hydrochloride powder is dissolved in hot water, and then a weak base, such as baking soda (sodium bicarbonate) or household ammonia, is added. *2007 Commission Report* 62-63; *1995 Commission Report* 14; *Processing Overview* 9. The base reacts with cocaine hydrochloride to form cocaine base and other substances. *Processing Overview* 9. Cocaine base precipitates out of the water; the water is heated and the cocaine base melts into an oil; that oil solidifies as the mixture cools. *Ibid.* This solid is removed from the liquid, dried, broken or cut into small off-white chunky "rocks," and sold on the street as "crack" or "crack cocaine." *1995 Commission Report* 14. This process is simpler and safer than the "freebasing" process, and it has become the prevailing method in the United States for illicit conversion of cocaine hydrochloride powder into cocaine base.

c. The method by which cocaine is consumed determines the onset, intensity, and duration of the drug's physiological and psychotropic effects. *1995 Commission Report* 7, 9, 11, 14, 23; Casale & Klein 96-97. The more rapidly the drug reaches the brain, the more in-

tense the effect, but the shorter the duration of the effect. *1995 Commission Report* 24; see Nat'l Inst. on Drug Abuse, *NIDA Info Facts: Cocaine*, http://nida.nih.gov/infofacts/cocaine.html.

Injected cocaine hydrochloride or smoked cocaine base reaches the brain most quickly, but it has short-lasting effects. For that reason, users of cocaine who inject or smoke it are more likely to "administer the drug more frequently" to sustain the intense highs; this in turn increases the likelihood of developing an addiction. *2007 Commission Report* 63-64; *1995 Commission Report* 24. By contrast, when cocaine hydrochloride is insufflated, the effects are "slow in onset, longer acting, and less likely to involve administering the drug frequently." *1995 Commission Report* 24. Because cocaine base can only be smoked, it is generally regarded as more addictive than cocaine hydrochloride (powder cocaine), which typically is insufflated. See *2007 Commission Report* 66-67; *Kimbrough* v. *United States*, 552 U.S. 85, 94, 98 (2007).

3. In January 2005, petitioner called a man who, unbeknownst to petitioner, was a confidential informant for the government and offered to sell him crack cocaine. Pet. App. 2a. The informant, a former drug dealer, was working with federal agents to investigate drug and firearm sales in the Boston area. *Ibid.* In a follow-up recorded call initiated by the informant, petitioner confirmed that he had "the cookies," a slang term for crack cocaine, but also used the word "riggedy," a slang term for powder cocaine. *Ibid.*; see Gov't Supp. C.A. App. 155-156. The informant asked petitioner if he could "chef [the cocaine] up," *i.e.*, "cook" it into "crack,"

and petitioner said he would. Gov't Supp. C.A. App. 28, 156; see Pet. App. 2a; C.A. App. 67.

Despite the informant's request that petitioner "chef up" the cocaine, petitioner sold the informant only powder cocaine at their next meeting. Pet. App. 2a; Gov't Supp. C.A. App. 30, 158, 160-162, 291, 294, 325-326. In later conversations, the informant specified that next time he wanted crack, not powder cocaine. Pet. App. 2a. The informant met with petitioner a few days later, but petitioner could not sell the informant crack at that time because he had left the equipment needed for cooking powder cocaine into crack at his girlfriend's house. See Gov't Supp. C.A. App. 124-125, 252-254.

In April 2005, petitioner and the informant discussed another drug deal, with the informant asking for "flago," another slang term for crack; stating that he wanted petitioner to "chef" it; and emphasizing that he did not want cocaine powder. Gov't Supp. C.A. App. Br. 173-174; C.A. App. 69-71. Petitioner then sold the informant two bags of drugs for $1800. Gov't Supp. C.A. App. 54-55, 184, 298; Pet. App. 2a. The bags contained an off-white chunky substance. Gov't C.A. Supp. App. 298, 336. Laboratory testing determined that the substance in the bags contained cocaine base, weighed 55.1 grams in total, and was 40% pure. Pet. App. 2a; Gov't C.A. Supp. App. 331-335. Sodium bicarbonate was not found in the sample in detectable amounts. Gov't C.A. Supp. App. 342-345 (government chemist's testimony).

4. Petitioner was indicted and proceeded to a jury trial on two drug counts: one charging distribution of powder cocaine, and one charging distribution of 50

grams or more of cocaine base. Pet. App. 1a-3a; see C.A. App. 14-24 (indictment).[11]

a. At trial, petitioner asked the district court to instruct the jury that to find him guilty of distribution of cocaine base, it had to find beyond a reasonable doubt that he "distributed the form of cocaine base known as crack cocaine." C.A. App. 53. Petitioner's proposed jury instruction defined "crack" as follows:

> "Crack" is a street name for a form of cocaine base, usually prepared by processing cocaine hydrochloride and sodium bicarbonate, and usually appearing in a lumpy, rocklike form.

Id. at 53-54. Petitioner also asked that the jury be instructed that "[c]hemical analysis cannot establish a substance as crack because crack is chemically identical to other forms of cocaine base, although it can reveal the presence of sodium bicarbonate, which is usually used in the processing of crack." *Id.* at 53-54. At the instructions conference, petitioner reiterated his position that the reference to "cocaine base" in 21 U.S.C. 841(b)(1)(A)(iii) required a finding that he possessed "crack cocaine." Gov't C.A. Supp. App. 355-358.[12]

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[11] Petitioner was also indicted on, and pleaded guilty before trial to, one count of possession of a firearm with an obliterated serial number, in violation of 18 U.S.C. 922(k). Pet. App. 2a-3a.

[12] Although the jury in this case was instructed to decide if the offense involved 50 grams or more of "cocaine base" for purposes of the mandatory minimum sentence in 21 U.S.C. 841(b)(1)(A), that issue may be resolved by the court rather than a jury. Drug quantity need not be decided by a jury when it results in an increase in a mandatory minimum sentence, so long as the defendant is not sentenced above the otherwise-applicable statutory maximum sentence. See *United States* v. *Pineda-Buenaventura*, 622 F.3d 761, 774 (7th Cir. 2010); *United*

The district court rejected petitioner's proposed instruction, holding, based on circuit precedent, that "cocaine base" is "the non-hydrochloride form of cocaine, which may or may not manifest itself in something that's been identified as crack cocaine." Gov't C.A. Supp. App. 359. The court instructed the jury that "the statute that's relevant asks about cocaine base. Crack cocaine is a form of cocaine base, so you'll tell us whether or not what was involved is cocaine base." *Id.* at 428. The jury found petitioner guilty on both counts, specifically finding that he had distributed 50 grams or more of "cocaine base." Pet. App. 1a; Gov't Supp. C.A. App. 468 (verdict).

b. The Presentence Investigation Report (PSR) calculated petitioner's offense level under Sentencing Guidelines § 2D1.1 (2006). PSR ¶¶ 21-22. For the purpose of that Guidelines provision, "'[c]ocaine base" * * * means 'crack,'" and "crack" is defined as "the street name for a form of cocaine base, usually prepared by processing cocaine hydrochloride and sodium bicarbonate, and usually appearing in a lumpy, rocklike form." Sentencing Guidelines § 2D1.1(c) (n.D) (2006). The PSR determined that the cocaine base in petitioner's case was "crack," and it therefore held him accountable for 61.7 grams of powder cocaine and 55.1

States v. *Webb*, 545 F.3d 673, 678 (8th Cir. 2008), cert. denied, 129 S. Ct. 2013, and 129 S. Ct. 2021 (2009); *United States* v. *Toliver*, 351 F.3d 423, 430 (9th Cir. 2003), cert. denied, 541 U.S. 1079 (2004); *United States* v. *Goodine*, 326 F.3d 26, 27-34 (1st Cir. 2003), cert. denied, 541 U.S. 902 (2004); *United States* v. *Sanchez*, 269 F.3d 1250, 1268 (11th Cir. 2001) (en banc), cert. denied, 535 U.S. 942 (2002); but see *United States* v. *Branham*, 515 F.3d 1268, 1275-1276 (D.C. Cir. 2008); *United States* v. *Gonzalez*, 420 F.3d 111, 122-125 (2d Cir. 2005); *United States* v. *Martinez*, 277 F.3d 517, 528 (4th Cir.), cert. denied, 537 U.S. 899 (2002); but cf. *United States* v. *Velasco-Heredia*, 319 F.3d 1080 (9th Cir. 2003).

grams of cocaine base. PSR ¶ 22. That yielded an offense level of 30, PSR ¶¶ 23-24, 29, 46, which, combined with petitioner's criminal history category of III, gave petitioner an advisory Guidelines range of 121 to 151 months of imprisonment, PSR ¶¶ 55, 93. The PSR also noted that because petitioner was convicted of an offense involving "50 grams or more of * * * cocaine base," he was subject to a mandatory minimum sentence of 120 months under 21 U.S.C. 841(b)(1)(A)(iii). See PSR ¶ 92.

Significantly, petitioner did not object to the PSR's finding that the cocaine base at issue in his case was "crack." In his sentencing memorandum, petitioner acknowledged that his "conviction for distributing over 50 grams of crack cocaine would normally mandate a 10 year sentence," C.A. App. 55, but argued that the court should nonetheless impose a sentence in a range of 41-51 months because, in his view, the government had engaged in impermissible sentencing factor manipulation through the informant's "repeated[]" requests that petitioner "cook the cocaine into crack," *id.* at 57.

At sentencing, the district court determined that 121 to 151 months was the applicable advisory Guidelines range. 8/8/2008 Sent. Tr. 39-40. The court rejected petitioner's claim of impermissible sentencing factor manipulation. *Id.* at 37-39. The court then varied from the advisory Guidelines range of 121-151 months, finding that the mandatory minimum sentence of 120 months required under 21 U.S.C. 841(b)(1)(A)(iii) for offenses involving 50 grams or more of cocaine base sufficed to accomplish the sentencing goals set forth in 18 U.S.C. 3553(a). 8/8/2008 Sent. Tr. 39-43.

5. The court of appeals affirmed. Pet. App. 1a-12a. As relevant here, petitioner attacked his ten-year sentence on the ground that the term "cocaine base" in 21 U.S.C. 841(b)(1)(A)(iii) "should be read to apply only to that form of cocaine base called crack." Pet. App. 9a. The court rejected that claim, explaining that Section 841(b)(1)(A) "refer[s] explicitly to 'cocaine base'" and should not be "judicially restricted to only the specific form of cocaine base known as crack." *Id.* at 10a. The court acknowledged that some courts of appeals had limited "cocaine base" to "crack," *id.* at 9a & n.3, but adhered to circuit precedent, which had "read the statute according to its terms" to hold that "cocaine base" in Section 841 refers to " 'all forms of cocaine base, including but not limited to crack cocaine.' " *Id.* at 10a (quoting *United States* v. *Anderson*, 452 F.3d 66, 86-87 (1st Cir.), cert. denied, 549 U.S. 1068 (2006)).

SUMMARY OF ARGUMENT

"Cocaine base" in the CSA's penalty provisions means the chemically basic form of cocaine, which is readily identifiable using standard techniques of chemical analysis. It does not mean the street term "crack," which is an imprecise word that would exclude substances that the statute was intended to cover.

A. The penalty provision at issue here, 21 U.S.C. 841(b)(1)(A)(iii), refers to "cocaine base," and "cocaine base" has a plain, unambiguous meaning: the form of cocaine classified chemically as a base. Although "crack" is one form of "cocaine base," nothing in the statute limits its reach to the particular form of cocaine base known on the street as "crack." Indeed, the term "crack" is not used anywhere in the CSA. If Congress

had wanted to limit the sentencing provision to "crack," it easily could have said so.

B. The use of the chemical definition of "cocaine base" is supported by the CSA's overall approach to identifying controlled substances. The CSA identifies the substances it regulates using chemical and botanical terminology; it does not use street names. Giving "cocaine base" its settled chemical meaning is fully consistent with that approach; limiting "cocaine base" to the undefined street term "crack" is not.

C. Giving "cocaine base" its plain meaning is consistent with the statute's history and purposes. Congress added enhanced penalties for cocaine base to the CSA in 1986, after learning that drug traffickers were processing powder cocaine into new forms of cocaine that could be consumed in a way—smoking—that would give users a more intense high. Congress was prompted to act principally because of the emergence of "crack," but it was also aware of, and concerned about, other forms of cocaine base, including coca paste and "freebase." Those other forms of cocaine base can be smoked, and they are chemically and pharmacologically the same as "crack."

There is no reason to believe that Congress would have used the chemical term "cocaine base" to cover only the type of cocaine base known as "crack." That is especially true because, in the same bill that included the 1986 Act, Congress criminalized trafficking in controlled substance analogues—substances that are chemically and pharmacologically similar to listed controlled substances.

D. Petitioner's approach, which relies on a street name to impose extra-textual limitations on the term

"cocaine base," would create ambiguities and practical difficulties. Although petitioner argues that "cocaine base" means "crack," he does not advocate any specific definition of "crack." The experience in the federal courts demonstrates a lack of consensus on the meaning of that street term. Moreover, by focusing on production methods, rather than the chemical form of the drug involved, petitioner's approach would create incentives for innovative drug traffickers to find other means of production of "cocaine base" to avoid the penalties set out for that substance in the CSA.

E. Petitioner's other arguments for limiting "cocaine base" to "crack" lack merit. Contrary to petitioner's submission, the government's view does not create superfluities or absurd results. Nor does the Sentencing Guidelines' definition of "cocaine base" inform that term's meaning in the United States Code. That definition is expressly limited to the Guidelines context. Congress has not delegated to the Commission the task of construing the term "cocaine base," and Congress's failure to disapprove the Commission's definition is not an approval of the definition for statutory purposes. Indeed, such a definition would make little sense in the context of the statute, where controlled substances are identified based on their chemical makeup.

F. The rule of lenity has no application here. The term "cocaine base" is not itself ambiguous—it has a settled scientific meaning—and the focus on "crack" in the legislative record does not create the type of grievous ambiguity that could make resorting to the rule of lenity appropriate.

ARGUMENT

THE TERM "COCAINE BASE" IN 21 U.S.C. 841(b)(1) REFERS TO ALL SUBSTANCES CHEMICALLY IDENTIFIED AS COCAINE BASE

In the sentencing provisions of the Controlled Substances Act, Congress provided for an enhanced penalty if the defendant's offense involves "cocaine base." The question in this case is whether "cocaine base" should be interpreted using its settled, unambiguous scientific meaning—the form of cocaine classified chemically as a base—or should be limited to one particular form of cocaine base known by the street name "crack." The statute's text answers this question: the enhanced penalties apply to an offense involving any form of "cocaine base." Application of the settled scientific meaning of "cocaine base" is consistent with the CSA's overall approach, which defines substances based on chemical and botanical terms, rather than street names, and it is consistent with Congress's purposes. Injecting street names into the CSA as petitioner proposes would raise a number of definitional uncertainties and practical difficulties. Petitioner provides no good reason to ignore the statute's plain language. The judgment below should be affirmed.

A. The Statutory Text Refers To "Cocaine Base," Not "Crack"

"The task of resolving the dispute over the meaning of [a statute] begins where all such inquiries must begin: with the language of the statute itself." *United States* v. *Ron Pair Enters.*, 489 U.S. 235, 241 (1989); see *Dean* v. *United States*, 129 S. Ct. 1849, 1853 (2009). Where "the statute's language is plain, the sole function of the courts is to enforce it according to its terms." *Ron Pair*,

489 U.S. at 241 (internal quotation marks omitted). The statutory text here is clear.

1. Section 841(b) of Title 21 sets out the applicable penalties for a person who has distributed a controlled substance in violation of federal law. 21 U.S.C. 841(a). The penalty that applies depends on amount and type of the chemical involved.

At the time of petitioner's offense, Section 841(b)(1)(A) provided that an individual who distributes a controlled substance is subject to a ten-year minimum sentence if his offense involves:

> (ii) 5 kilograms or more of a mixture or substance containing a detectable amount of—
>
> > (I) coca leaves, except coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed;
> >
> > (II) cocaine, its salts, optical and geometric isomers, and salts of isomers;
> >
> > (III) ecgonine, its derivatives, their salts, isomers, and salts of isomers; or
> >
> > (IV) any compound, mixture, or preparation which contains any quantity of any of the substances referred to in subclauses (I) through (III); [or]
>
> (iii) 50 grams or more of a mixture or substance described in clause (ii) which contains cocaine base[.]

21 U.S.C. 841(b)(1)(A). By their plain terms, Clause (ii) describes a variety of cocaine-related substances regu-

lated by the Act, and Clause (iii) then provides for a reduced quantity threshold in the event that the particular cocaine-related substance involved in the offense is "cocaine base."

2. The meaning of "cocaine base" in the CSA is clear. "Cocaine base" has a settled, unambiguous scientific meaning: it is the form of cocaine classified chemically as a base, with the chemical formula $C_{17}H_{21}NO_4$ and a particular molecular structure, see *Merck Index* 2455, at 412; *United States* v. *Jackson*, 968 F.2d 158, 163 (2d Cir.), cert. denied, 506 U.S. 1024 (1992), and it may be readily identified by chemical analysis, see, *e.g.*, *United States* v. *Easter*, 981 F.2d 1549, 1558 (10th Cir. 1992), cert. denied, 508 U.S. 953 (1993). Congress did not define cocaine base to mean anything else, nor did it limit cocaine base to "crack."

Cocaine base is distinct from cocaine hydrochloride, a salt form of cocaine, which has a different chemical formula, a different molecular structure, and different physical properties. See *Jackson*, 968 F.2d at 161; see also *United States* v. *Edwards*, 397 F.3d 570, 574 (7th Cir. 2005); *United States* v. *Robinson*, 144 F.3d 104, 108 (1st Cir. 1998). In choosing the term "cocaine base," Congress "chose[] a scientifically precise method of determining which substances are subject to enhanced penalties." *United States* v. *Palacio*, 4 F.3d 150, 153 (2d Cir. 1993), cert. denied, 510 U.S. 1166 (1994).

In interpreting Section 841(b)(1)(A)(iii), this Court should give the term "cocaine base" its settled scientific meaning. The Court has long recognized that when Congress uses a technical, scientific, or other term of art in a statute without providing an explicit definition, the phrase should be given meaning by reference to the ap-

propriate art or science. See *Republic of Arg.* v. *Weltover, Inc.*, 504 U.S. 607, 613-614 (1992); *McDermott Int'l, Inc.* v. *Wilander*, 498 U.S. 337, 342 (1991); *Corning Glass Works* v. *Brennan*, 417 U.S. 188, 201 (1974); *O'Hara* v. *Luckenbach S.S. Co.*, 269 U.S. 364, 370-371 (1926). Giving "cocaine base" its settled scientific meaning makes particular sense here, where the entire statutory scheme uses chemical and botanical terms of this type, rather than street names or slang. See pp. 24-27, *infra*.

It is true that the term "cocaine base" is somewhat redundant, because chemically "cocaine" *is* basic. See Pet. Br. 39; Physicians & Scientists Amicus Br. 13-14; see also *Merck Index* 2455, at 412; pp. 5-6, *supra*. But that provides no basis for casting aside the plain meaning of "cocaine" and "base" or the "chemical-term-of-art approach" (Pet. Br. 39) that pervades the CSA. Congress reasonably decided to add the word "base" to clarify that it was referring to the chemically basic form of cocaine, as opposed to the salt form of the drug that might colloquially be referred to as "cocaine." See *Webster's Third* 180 (defining "base" as "a compound * * * capable of reacting with an acid to form a salt"); see also, *e.g.*, Pet. Br. 17-18 (differentiating between base and salt forms of cocaine). That is, simply referring to "cocaine" in Clause (iii) erroneously might have led some to believe that Clause (iii) reached, for example, powder cocaine. Contrary to petitioner's suggestion (Br. 39), Congress's addition of the word "base" clarifies, rather than obscures, the meaning of the term "cocaine base." By referring to "cocaine base," Congress achieved both chemical accuracy and practical clarity. The addition of the chemical term "base" also reinforces Congress's in-

tent to use scientific concepts and terms to avoid confusion that could result from reliance on colloquial terms.

3. Petitioner contends (Br. 28) that the term "cocaine base" refers only to the particular form of "cocaine base" known on the street as "crack." There is no textual basis for such a limitation. As petitioner acknowledges, "crack" is one form of "cocaine base." *Id.* at 19. There are other usable forms of the drug where cocaine exists in its base form, such as coca paste (see pp. 7-8, *supra*) and "freebase" (see pp. 8-9, *supra*). By its plain terms, the statute encompasses all of these forms.

Congress did not define "cocaine base" as "crack" in the statute; indeed, it did not refer to "crack" anywhere in the CSA. This Court "ordinarily resist[s] reading words or elements into a statute that do not appear on its face." *Dean*, 129 S. Ct. at 1853 (citation omitted). Here, the "proper inference [to] draw from Congress' use of the chemical term 'cocaine base,' without explanation or limitation, is that [Congress] intended the term to encompass all forms of cocaine base." *United States* v. *Barbosa*, 271 F.3d 438, 466 (3d Cir. 2001), cert. denied, 537 U.S. 1049 (2002). It would be odd to limit the scope of Section 841(b)(1)(A)(iii) to only one particular form of "cocaine base" using a street term that appears nowhere in the statute. It would be odder still to do so where, as here, the street term lacks a settled meaning and petitioner does not define it. See pp. 35-40, *infra*.

4. If Congress had wanted to limit the scope of Section 841(b)(1)(A)(iii) to "crack" cocaine, it could easily have done so. Congress was aware when it enacted the provision at issue that not all cocaine base was "crack." See pp. 29-31, *infra*. Had Congress intended to limit the provision's scope to "crack," Congress could have re-

ferred to "crack," or "crack cocaine," or "that form of cocaine base commonly known as 'crack' cocaine" in Section 841(b)(1)(A)(iii). Or it could have expressly defined "cocaine base" as "crack" in the lengthy list of definitions in the Act, 21 U.S.C. 802. See, *e.g.*, 21 U.S.C. 802(16) (defining "marihuana"); 21 U.S.C. 802(18) (defining "opiate"); 21 U.S.C. 802(41) (defining "anabolic steroid"); see also Sentencing Guidelines § 2D1.1(c) (n.D) (defining "cocaine base" as "crack"). But "Congress did not write the statute that way." *Russello* v. *United States*, 464 U.S. 16, 23 (1983) (quoting *United States* v. *Naftalin*, 441 U.S. 768, 773 (1979)). Instead, it used the broader, more inclusive chemical term "cocaine base." This Court should "presume that a legislature says in a statute what it means and means in a statute what it says there." *Connecticut Nat'l Bank* v. *Germain*, 503 U.S. 249, 253-254 (1992).

Where Congress chooses to use a broad term without qualification or limitation, this Court gives effect to the language Congress chose. See *Ali* v. *Federal Bureau of Prisons*, 552 U.S. 214, 227 (2008) ("Had Congress intended to limit [28 U.S.C.] § 2680(c)'s reach as petitioner contends, it easily could have written 'any other law enforcement officer *acting in a customs or excise capacity.*' Instead, it used the unmodified, all-encompassing phrase 'any other law enforcement officer.' Nothing in the statutory context requires a narrowing construction."); see also, *e.g.*, *Ron Pair*, 489 U.S. at 242 n.4; *United States* v. *Turkette*, 452 U.S. 576, 581 (1981). Here, "[n]othing on the face of the statute suggests a congressional intent to limit its coverage." *Custis* v. *United States*, 511 U.S. 485, 493, 501 (1994) (citations omitted). Section 841(b)(1)(a)(A)(iii) applies to "exactly what its

terms suggest: the possession of any form of 'cocaine base.'" *United States* v. *Medina*, 427 F.3d 88, 92 (1st Cir. 2005).

B. Giving "Cocaine Base" Its Plain Chemical Meaning Is Consistent With The Act's Overall Approach For Identifying Controlled Substances

Interpreting "cocaine base" using its unambiguous scientific meaning makes particular sense in light of the statute as a whole. The CSA generally identifies controlled substances using chemical or botanical names, not street terms. Interpreting "cocaine base" to mean only "crack" would cast aside Congress's chosen method for identifying controlled substances in favor of a street term that appears nowhere in the CSA.

1. The CSA elaborately identifies the substances it covers. Congress defined these substances in a series of five initial schedules, 21 U.S.C. 812(c), and it authorized the Attorney General to add drugs to the schedules in certain circumstances, 21 U.S.C. 811. Congress consistently identified substances the CSA covers using chemical and botanical terminology, not street names.

Chemical terminology is the standard vocabulary of the CSA. The schedules refer to the terms used to identify drugs as "specific chemical designation[s]." 21 U.S.C. 812(c). Consistent with that self-characterization, 139 of the 145 distinct substances listed by Congress on the five schedules in 21 U.S.C. 812(c) are directly identified by their recognized chemical names or by formal chemical nomenclature.[13] Of the six remaining

[13] Chemical information—including chemical formula, chemical structure, and literature references—for nearly every entry on the CSA

scheduled controlled substances, one is "anabolic steroids," 21 U.S.C. 812(c) Sched. III(e), which is defined in 21 U.S.C. 802(41) to include dozens of substances identified by their formal chemical names and other "hormonal substance[s], *chemically* and pharmacologically related to testosterone," 21 U.S.C. 802(41)(A) (emphasis added). And the remaining five scheduled substances refer to plants or plant products. Most of these are defined by formal botanical classification, its own scientific art.[14]

The CSA does not define the substances it regulates using street terms. Congress did not list "smack" or "horse" as a proscribed Schedule I substance; rather, it listed "any of the following opium derivatives, their salts, isomers, and salts of isomers whenever the existence of such salts, isomers, and salts of isomers is possible within the specific chemical designation," including "heroin." 21 U.S.C. 812(c) Sched. I(b)(10). Similarly, Congress did not refer to "pot," "grass," or "weed"; it identified the substance as "marihuana," 21 U.S.C. 812(c) Sched. I(c)(10), and then further defined that term using its formal botanical classification, 21 U.S.C. 802(16) ("marihuana" includes "all parts of the plant Cannabis sativa L."). These examples demonstrate that

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Schedules can be readily retrieved by name from the National Center for Biotechnology Information's *PubChem* compound database, http://pubchem.ncbi.nlm.nih.gov.

[14] The five botanically based entries are: marihuana, 21 U.S.C. 812(c) Sched. I(c)(10); 21 U.S.C. 802(16) (further defining marihuana in botanical terms); peyote, 21 U.S.C. 812(c) Sched. I(c)(12) (peyote); see 21 C.F.R. 1308.11(d)(25) (further defining peyote in botanical terms); opium poppy and opium, 21 U.S.C. 812(c) Sched. II(a)(1) and (3); see 21 U.S.C. 802(19)-(20) (further defining opium-related substances in botanical terms); and coca leaves, 21 U.S.C. 812(c) Sched. II(a)(4).

in enacting the CSA, Congress made a conscious choice to identify controlled substances using scientific terms, including chemical and botanical terms. The choice to avoid reliance on undefined street terms makes sense, especially because some street names refer to more than one controlled substance. See, *e.g.*, Office of Nat'l Drug Control Policy, *Street Terms: Drugs and the Drug Trade, Drug Type*, http://www.whitehousedrugpolicy.gov/streetterms ("[r]acehorse charlie" refers to heroin or cocaine; "ready rock" refers to powder cocaine, crack cocaine, or heroin; "white dragon" refers to powder cocaine or heroin). Nothing in the text of the CSA supports petitioner's assertion (Br. 25) that Congress "looked to terms used in the drug trade in crafting the statutory language."

2. Giving "cocaine base" its settled chemical meaning is consistent with the statute's general approach to identifying controlled substances based on their chemical and botanical names. Like the vast majority of other substances listed in the schedules, "cocaine base" is "a chemical term * * * whose meaning is undisputed in the scientific community." *Jackson*, 968 F.2d at 163. It has a definite chemical formula and a particular chemical structure, which gives it certain physical properties that readily distinguish it from cocaine hydrochloride. See pp. 5-7, *supra*. Courts have widely recognized the difference between these two substances. See, *e.g.*, *Edwards*, 397 F.3d at 574; *Robinson*, 144 F.3d at 108; *United States* v. *Booker*, 70 F.3d 488, 491 & n.17 (7th Cir. 1995), cert. denied, 517 U.S. 1111 (1996).

Because Congress "chose[] a scientifically precise method of determining which substances are subject to enhanced penalties," *Palacio*, 4 F.3d at 153, it would be

inappropriate to cast aside that method and define "cocaine base" to mean "crack." Nor, for that matter, would it be appropriate to read "cocaine base" to mean "basuco," "yam," "twinkie," "bopper," or any of dozens of other street terms for cocaine base. See Office of Nat'l Drug Control Policy, *Street Terms: Drugs and the Drug Trade, Drug Type: Cocaine*, http://www.whitehousedrugpolicy.gov/streetterms/ByType.asp?intTypeID=3; see also Gov't C.A. Br. 6-7 (petitioner's references to cocaine base as "cookies" and "flago").

C. Interpreting "Cocaine Base" To Include All Chemically Basic Forms Of Cocaine Is Consistent With The Statute's History And Purposes

Petitioner contends (Br. 26) that "cocaine base" should be limited to "crack" because "Congress's purpose was to target crack cocaine." When the language of a statute is clear, as it is here, the legislative history of the statute may not be employed as a tool for generating uncertainty. See *Boyle* v. *United States*, 129 S. Ct. 2237, 2246-2247 (2009).

In any event, the statute's history and purposes support use of the plain meaning of "cocaine base." Although concerns about the prevalence of "crack" initially spurred Congress to action, the legislative history reveals an awareness that "crack" was only one form of cocaine base and that other forms (such as "freebase" and coca paste) were just as dangerous as crack. Congress's decision to reach all forms of "cocaine base" therefore was an informed one.

1. In 1986, Congress passed the Narcotics Penalties and Enforcement Act of 1986 (1986 Act), Pub. L. No. 99-570, Tit. I, Subtit. A, 100 Stat. 3207-2. That Act increased the penalties for drug trafficking, calibrated

to the quantity of drugs involved. See *id.* § 1002, 100 Stat. 3207-2 (codified in relevant part at 21 U.S.C. 841(b)(1)(A)(i)-(vii) and (B)(i)-(vii)). In the 1986 Act, Congress for the first time distinguished drug-trafficking crimes involving "cocaine base" from those involving other forms of cocaine, and it determined that crimes involving cocaine base should be subject to more severe penalties. See 21 U.S.C. 841(b)(1)(A)(ii)-(iii) and (B)(ii)-(iii).[15]

Petitioner is correct that the Congress that enacted the 1986 Act was prompted to act by a concern about "crack." See, *e.g.*, "*'Crack' Cocaine: Hearing Before the Permanent Subcomm. on Investigations of the S. Comm. on Governmental Affairs*, 99th Cong., 2d Sess. 1 (1986) (*Crack Cocaine Hearing*) ("[The Committee] meets today to examine a frightening and dangerous new twist in the drug abuse problem—the growing availability and use of a cheap, highly addictive, and deadly form of cocaine known on the streets as 'crack.'"). But it does not follow that the resulting legislation touched no more than "crack." "[S]tatutory prohibitions often go beyond the principal evil to cover reasonably comparable evils, and it is ultimately the provisions of our laws rather than the principal concerns of our legislators by which we are governed." *Oncale* v. *Sundowner Offshore Servs., Inc.*, 523 U.S. 75, 79 (1998).

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[15] Both the House and the Senate had a version of a bill to amend the penalty provisions. The House version used the phrase "cocaine freebase" (see H.R. 5394, 99th Cong., 2d Sess. § 101 (1986)), while the Senate version used the phrase "cocaine base" (see S. 2878, 99th Cong., 2d Sess. § 1002 (1986)). The Senate version ultimately was enacted. See *Jackson*, 968 F.2d at 162.

As explained below, giving "cocaine base" its accepted chemical meaning reaches both "crack" and "reasonably comparable evils," *Oncale*, 523 U.S. at 79, such as "freebase" and coca paste. That is an entirely natural result; "[t]he fact that a statute can be applied in situations not expressly anticipated by Congress does not demonstrate ambiguity. It demonstrates breadth." *Massachusetts* v. *EPA*, 549 U.S. 497, 532 (2007) (internal quotation marks omitted). As petitioner himself acknowledges (Br. 13), Congress took a "wide-ranging approach to combat drug abuse" in 1986. 132 Cong. Rec. 22,948-22,949 (1986) (statement of Rep. Young).

2. At the time it enacted the 1986 Act, Congress was aware that "cocaine base" was a broader category than "crack." At a Senate subcommittee hearing that preceded passage of the 1986 Act, witnesses explained that the term "crack" described only one particular form of cocaine base. Dr. Charles Schuster, the Director of the National Institute on Drug Abuse, explained that different methods could be used to prepare cocaine base and that the term "crack" was descriptive of the result of only one of those methods:

> [I]f cocaine is to be smoked, it must be converted into its free-base form. Previously, an alkali, such as ammonia, or bicarbonate of soda, was added to cocaine hydrochloride to form the cocaine base and then extracted using a solvent such as ether. However, individuals who were preparing free-base discovered that they didn't have to go through this costly and dangerous extraction process with ether, but rather they could simply precipitate the free-base and remove that, and it forms a waxy kind of material, which can be smoked to deliver cocaine. * * * In

> other words, crack is simply a street name for smokable cocaine free-base, prepared by a method which does not involve solvents.

Crack Cocaine Hearing 14. Similarly, in a prepared statement, Dr. Robert Byck, a Professor of Psychiatry and Pharmacology at Yale University School of Medicine, distinguished between crack and other forms of cocaine: "'[c]rack' is a crudely derived form of * * * free base of cocaine" but "[t]he free base is also present in cocaine 'paste' which is an intermediate product in producing the hydrochloride salt." *Id.* at 87.

Congress not only was informed about other forms of cocaine base than "crack," but it also learned that those substances were "smoked" in a manner similar to crack. Dr. Byck noted that coca paste, a form of cocaine base, may be smoked and "has been used in South America and in this country for at least fifteen years." *Crack Cocaine Hearing* 87. He reported coca paste use "in Los Angeles, San Francisco and other cities" as early as 1980. Sidney Cohen, *Coca Paste and Freebase: New Fashions in Cocaine Use*, Drug Abuse & Alcoholism Newsl., Apr. 1980, at 1 (cited in *Crack Cocaine Hearing* 91 (statement of Robert Byck, M.D.)) (*Coca Paste and Freebase*). Congress was also well aware of the illicit use of "freebase" cocaine in light of recent high-profile accidents with that drug. *Crack Cocaine Hearing* 2 (noting that "free-basing cocaine * * * was the cause of Richard Pryor's burns in 1980 and a suspected cause of Len Bias' death last month") (opening statement of Chairman William V. Roth, Jr.); see also, *e.g.*, 132 Cong. Rec. at 23,002 (statement of Rep. Lantos); *id.* at 4418 (quoting Tom Morganthau et al., *Kids and Cocaine*, Newsweek, Mar. 17, 1986, at 58). Dr. Schuster de-

scribed the methodology for producing "freebase" cocaine and explained that it was a commonly used form of cocaine base before the emergence of crack. *Crack Cocaine Hearing* 14; see *1995 Commission Report* 13 ("freebase" was used by "ten to 20 percent of the cocaine-abusing population" in the 1970s); see also Pet. Br. 18-19.

Petitioner's citations to the legislative record show that Congress was concerned about the particular form of cocaine base known as "crack," but they do not establish that Congress's concern was limited to that form of the drug. Given Congress's awareness that "crack" described only one type of cocaine base, and that other forms of cocaine base were used in a manner similar to crack, Congress's choice of the inclusive term "cocaine base" should be understood to reach cocaine base in all of its forms.

3. Giving "cocaine base" its plain scientific meaning is consistent with Congress's purposes in the 1986 Act. Congress was concerned about the proliferation of "crack" because that drug could be smoked, rather than injected or insufflated, because it gave users an usually intense high, and because the short duration of that high made the substance extremely addictive. See, *e.g.*, *Kimbrough* v. *United States*, 552 U.S. 85, 95-96 (2007); 132 Cong. Rec. at 30,470 (statement of Sen. Hawkins) ("[Powder cocaine] can be processed into freebase and crack, which is smoked. Younger people * * * are attracted to the smokeable forms."); *1995 Commission Report* 14-15 (comparing different means of administering cocaine-related substances). But, as Congress was aware, "crack" is not the only form of cocaine base that may be smoked. Coca paste and "freebase" may also be

smoked, and they pose the same dangers as "crack." Nothing suggests that Congress, which was concerned about the "drug use * * * epidemic" (132 Cong. Rec. at 22,991 (statement of Rep. Dorgan)), would have exempted these materials from its penalties for "cocaine base"—particularly because such an exception could drive both dealers and users toward these other drugs.

The form of cocaine base known as "freebase" provides the same quick high to the user as does crack cocaine and has the same addictive qualities. In fact, it may be more addictive because it is typically purer than crack: "crack cocaine processors tend to be less careful when making crack cocaine" and "often cut the end product with adulterants to increase the weight and bulk of the crack rocks." *1995 Commission Report* 14 n.36. And "freebasing" poses additional dangers not present with crack cocaine, because if the user attempts to consume it before the ether has evaporated, the ether may "ignite or explode." *Id.* at 13. Petitioner himself acknowledges (Br. 19) that "freebase" is a form of "cocaine base" that "delivers the same high" as "crack."

While "freebasing" cocaine has largely been superseded by the use of "crack," some still use the freebase form of cocaine base today. See, *e.g.*, *United States* v. *Gonzalez*, 608 F.3d 1001, 1003 (7th Cir. 2010), cert. denied, No. 10-7602, 2011 WL 55702 (Jan. 10, 2011); *id.* at 1005 (noting that "some drug users who want the faster, more intense high produced by cocaine base but don't want to buy street-quality crack are continuing to make and consume their own freebase"). And when Congress enacted the language at issue here, it could not know which particular form of cocaine base would become most prevalent in the future.

Coca paste also contains cocaine base, and it poses dangers similar to "crack." Congress was informed that just like "crack," when coca paste is smoked, it produces an "immediate, extreme euphoria," and a clinical study of its use revealed an "enormous compulsion to continue smoking coca paste until supplies were completely consumed." *Coca Paste and Freebase* 1-2. And just like crack, smoking coca paste poses severe health risks. *Id.* at 2 (noting the "fairly frequent appearance of psychotic reactions associated with chronic use [of coca paste] and the social and psychophysical deterioration"; smoking coca paste causes "abrupt and extreme mood shifts" as the user achieves an intense high that quickly ends); see *id.* at 2-3 (describing the effects of "smoking freebase, either in a special pipe or sprinkled on a cigarette" as "identical to smoking coca paste").

No evidence indicates that Congress intended to treat these two forms of cocaine base more leniently than "crack." "Crack," "freebase," and coca paste all contain cocaine base. In each substance, the cocaine base has the same chemical formula, same chemical structure, same physical properties, and same pharmacology. All three compounds can be smoked, thus allowing the drug to be absorbed into the bloodstream quickly and in large amounts—one of the key characteristics that prompted Congress to single out cocaine base in the first instance. And all three fit comfortably within the term "cocaine base."

4. Congress's intention to reach all forms of "cocaine base" is reinforced by another step Congress took in 1986. In the same bill that enacted the provision regarding "cocaine base," Congress passed the Controlled Substance Analogue Enforcement Act of 1986 (Analogue

Act), Pub. L. No. 99-570, Tit. I, Subtit. E, 100 Stat. 3207-14 (21 U.S.C. 802(32)(A), 813). The Analogue Act provides that substances that are chemically and pharmacologically similar to, but not identical to, listed controlled substances shall be treated as controlled substances. In particular, Congress provided that a "controlled substance analogue" shall be "treated, for the purposes of any Federal law as a controlled substance in schedule I." 21 U.S.C. 813.

As with the CSA generally, the Analogue Act defines "controlled substance analogue" in chemical terms, because "[t]he effects of a drug are generally a function of its chemical structure." H.R. Rep. No. 848, 99th Cong., 2d Sess. Pt. 1, at 6 (1986) (*House Report*). Under the Analogue Act, a "controlled substance analogue" includes any substance whose chemical structure "is substantially similar to the chemical structure of a controlled substance in schedule I or II," and that either has a "similar * * * or greater" "stimulant, depressant, or hallucinogenic effect on the central nervous system," or is represented or intended to have such an effect. 21 U.S.C. 802(32)(A); see, *e.g.*, *United States* v. *Turcotte*, 405 F.3d 515, 521-523 (7th Cir. 2005), cert. denied, 546 U.S. 1089 (2006).

The stated purpose of the Analogue Act is "to prohibit persons who specifically set out to manufacture or to distribute drugs which are substantially similar to the most dangerous controlled substances from engaging in this activity." S. Rep. No. 196, 99th Cong., 1st Sess. 5 (1985) (*Senate Report*). The reports accompanying this Act explained that law enforcement officers found themselves one step behind underground chemists who would slightly alter the molecular structure of a controlled

substance to create a new drug with a substantially similar effect. *Id.* at 1-2; see *House Report* 4.[16] Thus, Congress decided to send the "message to illicit drug traffickers" that they could "no longer * * * remain immune from punishment" when they "purposefully deal[] in drugs that imitate the most dangerous compounds defined by law." *Senate Report* 6; see, *e.g.*, *United States* v. *Hodge*, 321 F.3d 429, 432-434 (3d Cir. 2003).

In light of Congress's evident concern for punishing trafficking in substances that are merely chemically and pharmacologically *similar* to listed controlled substances, it would be surprising if, in the very same bill, Congress crafted Clause (iii) *not* to reach substances like coca paste and freebase, which are chemically and pharmacologically *identical* to "crack" in every relevant sense.

D. Petitioner's Approach Creates Definitional Uncertainties And Practical Anomalies

Choosing street terms over the scientific nomenclature used to identify controlled substances in the CSA would create ambiguities and practical difficulties.

1. Congress's use of chemical terms allows for the straightforward identification of the substance at trial. In particular, when the plain scientific meaning of "cocaine base" is used, the substance can readily be shown to contain (or not to contain) cocaine base through stan-

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[16] The Act was necessary despite the Attorney General's ability to temporarily list a controlled substance analog under Schedule I, because that procedure was "entirely reactive and [could] only operate after [such analog had] already been shown to pose a severe risk to the public health," and because even after that process, "another minor alteration in [the drug's] structure beg[an] the entire process afresh." *Senate Report* 2.

dard chemical analysis. See, *e.g.*, *Easter*, 981 F.2d at 1558. For example, in petitioner's trial, a government chemist testified that she used three standard techniques of chemical analysis (infared spectroscopy, gas chromatography mass spectroscopy, and gas chromatography) to identify cocaine base in the substance at issue here. Gov't C.A. Supp. App. 334-335.[17]

Under petitioner's regime, in contrast, a substance may not be identifiable using chemical terms. Forensic chemists cannot distinguish between "crack" and other forms of "cocaine base" on a molecular level, because the controlled substance they contain—cocaine—has the same chemical formula and structure in either case. See, *e.g.*, *Easter*, 981 F.2d at 1558. Indeed, in this case petitioner asked that the jury be instructed that "[c]hemical analysis cannot establish a substance as crack because crack is chemically identical to other forms of cocaine base." C.A. App. 53-54.[18] It would be

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[17] The DEA informs this Office that in prosecutions for controlled botanical substances, forensic chemists identify the substances in part by their physical characteristics and in part by extracting the specific chemically active component from the plant and conducting subsequent chemical analysis. For example, marihuana is in practice identified in part by the extraction of tetrahydrocannabinols, see 21 U.S.C. 812(c) Sched. I(c)(17); peyote is in practice identified in part by the extraction of the chemical compound mescaline, see 21 U.S.C. 812(c) Sched. I(c)(11); and opium poppy and related substances (21 U.S.C. 812(c) Sched. II(a)(1) and (3)) are in practice identified in part by the extraction of morphine or other recognized opiate alkaloids, see 21 U.S.C. 802(19)-(20).

[18] It is true that, if "crack" were defined as cocaine base prepared using certain reagents (such as baking soda), chemists could test for residual traces of those reagents. But the failure to find detectable amounts of those reagents does not mean those reagents were not used in producing "crack," because the reagent could have been fully con-

odd for Congress to have adopted an enhanced penalty provision for a substance that is not readily identifiable by scientific means.

2. Petitioner's proposal to limit "cocaine base" to "crack" poses more definitional questions than it answers. Although petitioner is emphatic that "cocaine base" must mean "crack," he does not advocate any particular definition of "crack" or explain how "crack" might be identified in a particular case. "Crack" is a street term that has no inherent plain meaning. It does not appear (in the drug-related sense) in common dictionaries.

In his brief to this Court, petitioner suggests a number of possible definitions of "crack." Sometimes he suggests that the key quality of crack is that it is "smokeable." Pet. Br. 8 (defining "crack" as "an easy-to-produce, smokeable substance containing cocaine that delivers large quantities of cocaine to the lungs") (internal quotation marks omitted); see also *id.* at 18, 20, 36. If that were true, then coca paste and "freebase" should also count as "crack," because they also are smokeable. See pp. 7-9, 30-31, *supra*.

On other occasions, petitioner identifies as the key feature of "crack" that it is made by cooking powder cocaine and baking soda. Pet. Br. 8 (crack is "formed by dissolving powder cocaine and baking soda in boiling water"). He also suggests that the absence of baking soda in his drug sample at trial meant it was not "crack." Br. 22 n.13. Yet elsewhere petitioner acknowledges (Br.

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sumed in the reaction. Nor would that approach serve Congress's objectives—which focused on the dangers of certain drugs, not particular methods of preparation. See p. 9, *supra* (noting that crack can be manufactured with other reagents, such as ammonia).

18) that "crack" can be made with "other weak bases" such as ammonia. See also, *e.g.*, *Gonzalez*, 608 F.3d at 1004.

At trial, petitioner advocated the Sentencing Guidelines' definition of "crack": "a form of cocaine base, usually prepared by processing cocaine hydrochloride and sodium bicarbonate, and usually appearing in a lumpy, rocklike form." C.A. App. 53-54; see Sentencing Guidelines § 2D1.1(c) (n.D). Petitioner does not expressly urge that definition now, perhaps because he did not contest at sentencing that the substance he sold met that definition. See p. 14, *supra*.

Petitioner's various suggestions thus raise a number of questions: Must the substance be smokeable to be "crack"? Must it have a certain effect when inhaled? Must it contain trace amounts of baking soda? Must it appear lumpy? Must it appear rock-like? These questions are easily avoided by using the plain scientific meaning of the term "cocaine base."

3. Those circuits that have accepted petitioner's argument that "cocaine base" should be judicially limited have struggled to describe that limitation in the absence of any statutory definition. Some courts have appeared to adopt the Sentencing Guidelines' definition of "crack," see *Edwards*, 397 F.3d at 574-577; *United States* v. *Munoz-Realpe*, 21 F.3d 375, 377-378 (11th Cir. 1994). The definition of "cocaine base" in the Sentencing Guidelines, of course, does not control the interpretation of that term in the statute. See pp. 47-49, *infra*. In any event, the Guidelines' definition—which depends upon how the substance "usually" is prepared and "usually" appears—is hardly precise. Recognizing the imprecision in the Sentencing Guidelines' definition, the Seventh

Circuit has rejected the view that "crack" must be prepared using baking soda, as opposed to some other weak base. See *Gonzalez*, 608 F.3d at 1004. Indeed, in order to apply the Guidelines' definition, the Seventh Circuit has developed a nonexclusive, six-factor test for determining whether a substance is "crack."[19]

The D.C. Circuit has determined that "cocaine base" does not refer to all chemically basic forms of cocaine, but has not decided between two possible limitations on "cocaine base": either limiting it only to "crack" (a term the court did not define) or limiting it to "any cocaine that is smokable." *United States* v. *Brisbane*, 367 F.3d 910, 913, cert. denied, 543 U.S. 938 (2004). That analysis has likewise proven difficult; at least one defendant in that circuit has argued that his cocaine base was not "crack" because it contained too many impurities to be smoked. As a result, DEA chemists were required to assemble a device similar to a "crack pipe" that (using a vacuum) could "smoke" a drug sample in a laboratory setting.[20]

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[19] See *United States* v. *Bryant*, 557 F.3d 489, 499-500 (7th Cir. 2009) (asking "(1) whether the substance at issue has tested positive for the presence of cocaine base; (2) the color of the substance; (3) the shape and texture of the substance; (4) the method of packaging; (5) the price of the substance; and (6) whether the seller represents the substance as or understands the substance to be crack") (internal quotation marks, footnotes, and brackets omitted).

[20] See John F. Casale, *Assessment of the Volatility (Smokeability) of Cocaine Base Containing 50 Percent Mannitol: Is It a Smokeable Form of "Crack" Cocaine?* 3 Microgram J. 130, 131 (2005); 89-0322 (TFH) Mem. Op. 5-8 (D.D.C. Aug. 3, 2006) (relying on government chemists' laboratory "smoking" experiment to deny defendant's objections to sentence).

The Ninth Circuit also has suggested that "cocaine base" is limited to "cocaine that can be smoked," *United States* v. *Shaw*, 936 F.2d 412, 415-416 (1991), although in recent cases, it suggested the Guidelines' definition might apply, see, *e.g.*, *United States* v. *Hollis*, 490 F.3d 1149, 1156-1157 & n.4 (2007), cert. denied, 552 U.S. 1166 (2008). And the Sixth Circuit has held that "'cocaine base' as used in § 841 means 'crack cocaine' " without actually defining the term "crack cocaine." *United States* v. *Higgins*, 557 F.3d 381, 395 (2009).

These courts' struggle with crafting extra-textual judicial limitations on "cocaine base" highlights why Congress used straightforward chemical terms, rather than undefined street terms, in the CSA.

4. In addition to creating interpretative difficulties, petitioner's approach would create incentives for enterprising drug traffickers to develop new production methods for "cocaine base." In petitioner's view, whether a substance is "cocaine base" may depend on precisely how cocaine hydrochloride is converted to cocaine base. Pet. Br. 18, 22 n.13. Freezing the definition of "cocaine base" to one prevalent method of making the base would encourage innovative drug traffickers to produce a similar product using a different method. "[I]llicit manufacture of cocaine is not a static situation, but rather is constantly evolving," an evolution that is "forcibly accelerated" when successful enforcement initiatives require drug traffickers to "[e]xperiment[] with new procedures designed to evade [government] controls." Casale & Klein 98. As the D.C. Circuit has observed, "the development of crack itself demonstrates" that it is "hazardous to predict what this illicit 'industry' will come up with next"; "[i]t may be that tomorrow

someone will invent a method of preparing smokable cocaine to replace the 'baking soda method' used to prepare crack." *Brisbane*, 367 F.3d at 914.

In fact, such shifts in production methods are already underway. "More recently and increasingly * * * the traditionally separate, sequential paste and base operations are being condensed into direct leaf-to-base laboratories, skipping the isolation of coca paste." Casale & Klein 98. And most recently, "many operators now produce cocaine base in the form of 'crack cocaine' directly from coca leaf." John F. Casale et al., *Tropane Ethyl Esters in Illicit Cocaine: Isolation, Detection, and Determination of New Manufacturing By-Products from the Clandestine Purification of Crude Cocaine*, 53 J. Forensic Sci. 661, 661 (2008). It is unclear whether petitioner would regard such products as "crack." But unless one assumes that Congress intended Section 841(b)(1)(A)(iii)'s reference to "cocaine base" to become obsolete through the efforts of clever drug traffickers, there is every reason to treat such products as "cocaine base."

E. Petitioner's Other Arguments For Limiting "Cocaine Base" To "Crack" Lack Merit

Petitioner raises a host of other objections, none of which justifies imposing an extra-textual limitation on the term "cocaine base."

1. Giving "cocaine base" its accepted chemical meaning does not render the penalties for other cocaine-related substances superfluous

Petitioner contends that "interpreting 'cocaine base' as a purely chemical term renders much of [21 U.S.C. 841(b)(1)(A)(ii)] superfluous." Pet. Br. 39; see Pet. 22-25. He is mistaken.

During the time period relevant here, Section 841(b)(1)(A) provided for a minimum ten-year sentence for a defendant who distributed either five kilograms or more of a mixture or substance containing the cocaine-related substances in Clause (ii)—namely, "coca leaves," "cocaine, its salts, optical and geometric isomers, and salts of isomers," or "ecgonine, its derivatives, their salts, isomers, and salts of isomers," 21 U.S.C. 841(b)(1)(A)(ii)—or 50 grams or more of "a mixture or substance described in clause (ii) which contains cocaine base," 21 U.S.C. 841(b)(1)(A)(iii).

Clause (iii) defines a subset of materials in Clause (ii), because Clause (iii) applies only to "a mixture or substance" that is both "described in clause (ii)" and "contains cocaine base." 21 U.S.C. 841(b)(1)(A)(iii) and (B)(iii). Thus, "by enacting clause iii, Congress intended to single out a subset of cocaine-related substances, all forms of cocaine base, for harsher treatment." *United States* v. *Sloan*, 97 F.3d 1378, 1382 (11th Cir. 1996), cert. denied, 520 U.S. 1277 (1997). Accordingly, Congress grafted Clause (iii) on to the preexisting statutory scheme in 1986. See 1986 Act, § 1002, 100 Stat. 3207-2; see also 21 U.S.C. 841(b)(1)(A) (Supp. II 1984).

Petitioner contends (Br. 38-39) that giving "cocaine base" its scientific meaning would "effectively encompass offenses involving every cocaine-related substance except powder and its chemical relatives." That is incorrect.

a. *Coca Leaves, etc.* Subclause (I) lists "coca leaves, except coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed." 21 U.S.C. 841(b)(1)(A)(ii)(I). Petitioner asserts (Br. 15, 17, 27, 40)

that coca leaves contain "molecules of cocaine," and based on that assertion, he contends (*id.* at 40-41) that distribution of coca leaves could always be punished as distribution of "cocaine base" under Clause (iii). Petitioner is mistaken.

In fact, the sentence for an offense involving coca leaves could not be enhanced using Clause (iii). The scientific literature establishes that cocaine does not exist in the base form in coca leaves, but rather as a salt. Early chemists concluded that the fact that individuals who chew coca leaves to obtain a high "never chew[] coca alone" but instead "mix[] it with lime and ash, that is * * * with strong bases that isolate the cocaine" strongly suggests that "[c]oca contains the cocaine in the state of an inert salt." M. Bignon, *Note on the Properties of Coca and Cocaine*, 16 Pharm. J. & Transactions 265, 265-266 (1885). That conclusion is consistent with an early DEA analysis of coca leaves, in which scientists extracted cocaine-related substances from the leaves using an organic solvent so as to avoid significantly changing their chemical structures and concluded that "the total cocaine extracted is not present as the free base." Emanuel Solon & Albert Sperling, *Determination of Cocaine in Coca Leaves*, 17 Microgram 62, 62-63 (1984). More recently, scientists have analyzed dried coca leaves using electron microscopy and have concluded that "cocaine is present * * * in vivo, complexed with phenols"—meaning that cocaine exists in the leaves as a salt compound, not as cocaine base. Jorge F.S. Ferreira et al., *Histochemical and Immunocytochemical Localization of Tropane Alkaloids in* Erthroxylum Coca *var.* Coca *and* E. Novogranatense *var.* Novogranatense, 159 Int'l J. Plant Sci. 492, 493, 501 (1998).

Nor is there any evidence that Congress understood coca leaves to contain cocaine in its chemically basic form. Clause (iii) asks whether cocaine base is "contain[ed]" in a mixture or substance described in Clause (ii). We are unaware of any evidence presented to Congress regarding the particular molecular form of cocaine in coca leaves—*i.e.*, whether cocaine exists in the base form, the salt form, or some other form. For that reason, it is unlikely Congress intended coca leaves to be covered by Clause (iii).

Consistent with that conclusion, this Office is aware of no prosecution in which the government has sought, or a defendant has received, an enhanced sentence under 21 U.S.C. 841(b)(1)(A)(iii) or (B)(iii) for an offense involving coca leaves, or even any prosecution under Title 21 based on a defendant's possession, distribution, or importation of coca leaves. The DEA likewise was unable to identify any case in which it had been called upon to analyze coca leaves for purposes of a United States prosecution.

Indeed, whether coca leaves are punishable under Clause (iii) is an academic question. Coca leaves are rarely if ever imported into the United States for illicit purposes, because the volume of leaves that would be necessary to produce a significant amount of cocaine for illicit consumption would be enormous, and the risk of importing coca leaves in volume would make importation economically unfeasible.[21]

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[21] There is some importation of coca leaves for licit purposes. See *Turner* v. *United States*, 396 U.S. 398, 411 n.12 (1970); *S.B. Penick & Co.* v. *United States*, 14 Cust. Ct. 9, 11 (1944) (discussing the tariff treatment of "decocainized" or "spent" coca leaves, which are "useful * * * as a flavoring agent by manufacturers of the popularly known

Petitioner himself offers no scientific data establishing that cocaine occurs in coca leaves as distinct "cocaine molecules," and though his amici cite (Br. 2) several sources for the proposition that cocaine is "found in the coca plant," those sources likewise do not offer scientific evidence about the form of the cocaine in the leaves.[22] While cocaine may be *extracted* from coca leaves through chemical processing,[23] that does not mean cocaine base exists in that molecular form in the leaves. See also note 17, *supra* (DEA identifies controlled botanical substances in part by extracting chemically active components from them). Petitioner has identified no reason to believe that Congress thought otherwise. Accordingly, coca leaves should not be treated as containing "cocaine base" for purposes of Clause (iii).

b. "*Cocaine*" *etc.* Subclause (II) comprises "cocaine, its salts, optical and geometric isomers, and salts of isomers." 21 U.S.C. 841(b)(1)(A)(ii)(II). Although petitioner is correct that as a chemical matter, "cocaine" means "cocaine base," Br. 39, that does not mean the

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cola drinks"); see generally 21 U.S.C. 802(39), 814, 822-826 (governing legitimate use of controlled substances).

[22] One article upon which the government relies also refers generally to "cocaine free base in the leaves," Casale & Klein 99, but that article did not purport to represent a studied scientific conclusion about the molecular state of the cocaine-related substance in the leaves.

[23] Congress did carve out from the list in Subclause (I) "coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed"; this provision makes clear that the part of the leaves left over after cocaine and related substances have been extracted is not considered a controlled substance. But there is no reason to suppose that Congress, in enacting that language, had any knowledge of the form of the cocaine-related compounds in the leaf.

reference to "cocaine base" in Clause (iii) makes the reference to "cocaine" in Clause (ii) superfluous. Clause (iii) is defined as reaching a subset of Clause (ii), and "cocaine base" is a subset of "cocaine, its salts, optical and geometric isomers, and salts of isomers." Moreover, one could not remove the word "cocaine" from the statute as petitioner suggests, because the word "cocaine" is the antecedent for the rest of Subclause (II): "its salts, optical and geometric isomers, and salts of isomers." 21 U.S.C. 841(b)(1)(A)(ii)(II). Petitioner acknowledges (Br. 39), as he must, that Subclause (II) remains "meaningful" at least "with respect to * * * cocaine hydrochloride powder."[24]

2. The government's reading does not lead to absurd results

Petitioner is likewise mistaken in contending that giving "cocaine base" its accepted chemical reading "leads to absurd results." Pet. Br. 41; see *id.* at 41-43.

Nearly all of petitioner's hypothetical "absurd results" revolve around coca leaves. See Pet. Br. 41-43. But as discussed above, pp. 42-44, *supra*, petitioner has not established that coca leaves "contain" cocaine base in the sense contemplated by the statute, the scientific literature suggests otherwise, and the government has never invoked the reduced quantity threshold in Clause (iii) under those circumstances.

Petitioner also suggests that it would be strange to apply higher minimum sentences "when [the] 'cocaine base' is dissolved in a liquid, is packed into fiberglass, or is melted into a flowerpot." Pet. Br. 43 (citations omit-

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[24] Subclause (III) covers ecgonine and its derivatives. Petitioner does not argue that Subclause (III) is made superfluous by Clause (iii).

ted). But there is nothing unusual about recognizing each of those trafficking methods for what they are: "a mixture * * * which contains cocaine base," 21 U.S.C. 841(b)(1)(A)(iii) and (B)(iii). The carrier medium in which a controlled substance is transported does not affect its classification under the CSA. Rather, under the approach taken in the 1986 Act, "the total quantity of what is distributed, rather than the amount of pure drug involved, is used to determine the length of the sentence." *Chapman* v. *United States*, 500 U.S. 453, 461 (1991). There is nothing anomalous about applying that approach to cocaine base. And to the extent that petitioner disagrees, his disagreement concerns when to include the weight of a drug carrier in determining the drug weight under Clause (iii), not which drugs are encompassed within Clause (iii) in the first place.

3. The Sentencing Guidelines' definition of "cocaine base" does not control that term's meaning in Section 841(b)(1)

Although petitioner notes (Br. 19, 21) the Sentencing Guidelines' definition of "cocaine base," he does not urge this Court to adopt that definition here. By its terms, the definition of the term "cocaine base" applies only "for the purposes of this guideline [§ 2D1.1]," and the Background Commentary repeats that limitation. Sentencing Guidelines § 2D1.1(c) (n.D). Read together, the Guideline definition and accompanying commentary demonstrate that the Commission intended its definition of the term "cocaine base" to be applied only to sentencing under the Guidelines. See *Neal* v. *United States*, 516 U.S. 284, 293 (1996) (observing that "it is doubtful that the Commission intended the constructive-weight method of the Guidelines to displace the actual-weight meth-

od that *Chapman* [v. *United States*, *supra*] requires" because the commentary "states that the new method is to be used 'for purposes of determining the base offense level'"). The Commission must be taken at its word. *Stinson* v. *United States*, 508 U.S. 36, 47 (1993).

But even if the Commission had intended its definition of the term to govern sentencing under Section 841(b)(1)(A)(iii), the revised Guideline nonetheless could not be given effect in that context. Congress has not delegated to the Commission the task of construing the term "cocaine base" in the sentencing statute. *Neal*, 516 U.S. at 290. Nothing in the 1986 Act suggests that Congress vested the Commission with the authority to interpret or to define the statutory phrase "cocaine base." Absent delegation of authority to an agency, sentencing statutes are construed and applied by the courts, using traditional tools of statutory construction. See, *e.g.*, *Deal* v. *United States*, 508 U.S. 129, 131-136 (1993); see also *Crandon* v. *United States*, 494 U.S. 152, 177 (1990) (Scalia, J., concurring in the judgment) ("The law in question, a criminal statute, is not administered by any agency but by the courts.").

The Commission's interpretation of the term "cocaine base" should not be given even persuasive weight in interpreting the statute. The definition was adopted with no accompanying analysis setting out the Commission's rationale for restricting "cocaine base" to "crack." Guidelines App. C, Amend. 487 (Nov. 1, 1993). Moreover, the Guidelines' definition has proven difficult to apply in the courts of appeals. See pp. 38-39, *supra* (noting Seventh Circuit's nonexclusive six-factor test).

Finally, Congress's failure to modify or disapprove the amendment adding this definition does not amount

to congressional approval of such a definition for *statutory* purposes. Congress had no reason to believe the Guidelines' definition would affect the calculation of mandatory minimum sentences under Section 841(b), and its failure to block that amendment cannot be viewed as congressional approval of such a change. This Court "[o]rdinarily * * * resist[s] reading congressional intent into congressional inaction," and this is not the exceptional case where Congress has "failed to act on a proposed amendment to the Guidelines in a high-profile area in which it had previously exercised its disapproval authority." *Kimbrough*, 552 U.S. at 106. Moreover, unlike the amendment at issue in *Kimbrough*, which would have affected the great majority of sentencing proceedings in this area, Congress could reasonably have understood the Commission's definition as having relatively modest practical effect, given that the overwhelming majority of "cocaine base" cases in fact involve "crack."

Accordingly, the Sentencing Guidelines should not be read to determine the meaning of the statute, especially where the Commission's definition is out of step with Congress's consistent approach to identifying controlled substances in the CSA.

F. The Rule Of Lenity Has No Application In This Case

Contrary to petitioner's contention (Br. 44-46), the rule of lenity has no application here. The rule of lenity is applicable only when there is a "grievous ambiguity" in the statutory text, such that, "after seizing everything from which aid can be derived, * * * [the Court] can make no more than a guess as to what Congress intended," *Muscarello* v. *United States*, 524 U.S. 125, 138-139 (1998) (internal quotation marks and citations

omitted), and "the equipoise of competing reasons cannot otherwise be resolved," *Johnson* v. *United States*, 529 U.S. 694, 713 n.13 (2000). A statute does not have a "grievous ambiguity" simply because courts have disagreed as to its meaning. *Reno* v. *Koray*, 515 U.S. 50, 64-65 (1995); *Moskal* v. *United States*, 498 U.S. 103, 108 (1990). Moreover, "[t]he mere possibility of articulating a narrow construction" is not sufficient to warrant application of the rule of lenity. *Smith* v. *United States*, 508 U.S. 223, 239 (1993).

Here, Congress used a specific chemical term—"cocaine base"—whose scientific meaning is plain. The word petitioner advances to limit that term—"crack"—appears nowhere in the relevant provision and nowhere in the CSA. Any "ambiguity" petitioner purports to identify arises not because the term "cocaine base" is susceptible to multiple meanings, but because petitioner wishes to use a set of interpretative principles—ones that look to street terms—that have no basis in the CSA. Moreover, the effect of using petitioner's proposed street term approach would be to create more, rather than less, uncertainty about the reach of the statute. It would also exempt from the Act's coverage substances that are chemically identical to, and every bit as dangerous as, "crack." Resorting to the rule of lenity is therefore unwarranted.[25]

[25] If this Court were to disagree with the government's submission and hold that Section 841(b)(1)(A)(iii) is limited to the form of cocaine base known as "crack," it should remand this case for further proceedings. As the government explained in its brief in opposition to certiorari (Br. in Opp. 9-12), ample evidence shows that the form of cocaine base petitioner distributed would qualify as "crack," and petitioner did not dispute at sentencing that his drugs qualified as "crack" under the Sentencing Guidelines' definition.

CONCLUSION

The judgment of the court of appeals should be affirmed.

Respectfully submitted.

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APPENDIX

1. 21 U.S.C. 802 provides in pertinent part:

Definitions

* * * * *

(32)(A) Except as provided in subparagraph (C), the term "controlled substance analogue" means a substance—

(i) the chemical structure of which is substantially similar to the chemical structure of a controlled substance in schedule I or II;

(ii) which has a stimulant, depressant, or hallucinogenic effect on the central nervous system that is substantially similar to or greater than the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance in schedule I or II; or

(iii) with respect to a particular person, which such person represents or intends to have a stimulant, depressant, or hallucinogenic effect on the central nervous system that is substantially similar to or greater than the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance in schedule I or II.

* * * * *

(C) Such term does not include—

(i) a controlled substance

* * * * *

2. 21 U.S.C. 812 provides in pertinent part:

(a) Establishment

There are established five schedules of controlled substances, to be known as schedules I, II, III, IV, and V. Such schedules shall initially consist of the substances listed in this section. The schedules established by this section shall be updated and republished on a semiannual basis during the two-year period beginning one year after October 27, 1970, and shall be updated and republished on an annual basis thereafter.

* * * * *

(c) Initial schedules of controlled substances

Schedules I, II, III, IV, and V shall, unless and until amended[1] pursuant to section 811 of this title, consist of the following drugs or other substances, by whatever official name, common or usual name, chemical name, or brand name designated:

SCHEDULE I

(a) Unless specifically excepted or unless listed in another schedule, any of the following opiates, including their isomers, esters, ethers, salts, and salts of isomers, esters, and ethers, whenever the existence of such isomers, esters, ethers, and salts is possible within the specific chemical designation:

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[1] Revised schedules are published in the Code of Federal Regulations, Part 1308 of Title 21, Food and Drugs.

(1) Acetylmethadol.
(2) Allylprodine.
(3) Alphacetylmathadol.[2]
(4) Alphameprodine.
(5) Alphamethadol.
(6) Benzethidine.
(7) Betacetylmethadol.
(8) Betameprodine.
(9) Betamethadol.
(10) Betaprodine.
(11) Clonitazene.
(12) Dextromoramide.
(13) Dextrorphan.
(14) Diampromide.
(15) Diethylthiambutene.
(16) Dimenoxadol.
(17) Dimepheptanol.
(18) Dimethylthiambutene.
(19) Dioxaphetyl butyrate.
(20) Dipipanone.
(21) Ethylmethylthiambutene.
(22) Etonitazene.
(23) Etoxeridine.
(24) Furethidine.

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[2] So in original. Probably should be "Alphacetylmethadol."

(25) Hydroxypethidine.

(26) Ketobemidone.

(27) Levomoramide.

(28) Levophenacylmorphan.

(29) Morpheridine.

(30) Noracymethadol.

(31) Norlevorphanol.

(32) Normethadone.

(33) Norpipanone.

(34) Phenadoxone.

(35) Phenampromide.

(36) Phenomorphan.

(37) Phenoperidine.

(38) Piritramide.

(39) Propheptazine.

(40) Properidine.

(41) Racemoramide.

(42) Trimeperidine.

(b) Unless specifically excepted or unless listed in another schedule, any of the following opium derivatives, their salts, isomers, and salts of isomers whenever the existence of such salts, isomers, and salts of isomers is possible within the specific chemical designation:

(1) Acetorphine.

(2) Acetyldihydrocodeine.

(3) Benzylmorphine.

(4) Codeine methylbromide.

(5) Codeine-N-Oxide.

(6) Cyprenorphine.

(7) Desomorphine.

(8) Dihydromorphine.

(9) Etorphine.

(10) Heroin.

(11) Hydromorphinol.

(12) Methyldesorphine.

(13) Methylhydromorphine.

(14) Morphine methylbromide.

(15) Morphine methylsulfonate.

(16) Morphine-N-Oxide.

(17) Myrophine.

(18) Nicocodeine.

(19) Nicomorphine.

(20) Normorphine.

(21) Pholcodine.

(22) Thebacon.

(c) Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation, which contains any quantity of the following hallucinogenic substances, or which contains any of their salts, isomers, and salts of isomers whenever the existence of such salts, isomers, and salts of isomers is possible within the specific chemical designation:

(1) 3,4-methylenedioxy amphetamine.

(2) 5-methoxy-3,4-methylenedioxy amphetamine.

(3) 3,4,5-trimethoxy amphetamine.

(4) Bufotenine.

(5) Diethyltryptamine.

(6) Dimethyltryptamine.

(7) 4-methyl-2,5-diamethoxyamphetamine.

(8) Ibogaine.

(9) Lysergic acid diethylamide.

(10) Marihuana.

(11) Mescaline.

(12) Peyote.

(13) N-ethyl-3-piperidyl benzilate.

(14) N-methyl-3-piperidyl benzilate.

(15) Psilocybin.

(16) Psilocyn.

(17) Tetrahydrocannabinols.

SCHEDULE II

(a) Unless specifically excepted or unless listed in another schedule, any of the following substances whether produced directly or indirectly by extraction from substances of vegetable origin, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis:

(1) Opium and opiate, and any salt, compound, derivative, or preparation of opium or opiate.

(2) Any salt, compound, derivative, or preparation thereof which is chemically equivalent or identical with any of the substances referred to in clause (1), except that these substances shall not include the isoquinoline alkaloids of opium.

(3) Opium poppy and poppy straw.

(4) coca[3] leaves, except coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed; cocaine, its salts, optical and geometric isomers, and salts of isomers; ecgonine, its derivatives, their salts, isomers, and salts of isomers; or any compound, mixture, or preparation which contains any quantity of any of the substances referred to in this paragraph.

(b) Unless specifically excepted or unless listed in another schedule, any of the following opiates, including their isomers, esters, ethers, salts, and salts of isomers, esters and ethers, whenever the existence of such isomers, esters, ethers, and salts is possible within the specific chemical designation:

(1) Alphaprodine.

(2) Anileridine.

(3) Bezitramide.

(4) Dihydrocodeine.

(5) Diphenoxylate.

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[3] So in original. Probably should be capitalized.

(6) Fentanyl.

(7) Isomethadone.

(8) Levomethorphan.

(9) Levorphanol.

(10) Metazocine.

(11) Methadone.

(12) Methadone-Intermediate, 4-cyano-2-dimethylamino-4,4-diphenyl butane.

(13) Moramide-Intermediate, 2-methyl-3-morpholino-1, 1-diphenylpropane-carboxylic acid.

(14) Pethidine.

(15) Pethidine-Intermediate-A, 4-cyano-1-methyl-4-phenylpiperidine.

(16) Pethidine-Intermediate-B, ethyl-4-phenylpiperidine-4-carboxylate.

(17) Pethidine-Intermediate-C, 1-methyl-4-phenylpiperidine-4-carboxylic acid.

(18) Phenazocine.

(19) Piminodine.

(20) Racemethorphan.

(21) Racemorphan.

(c) Unless specifically excepted or unless listed in another schedule, any injectable liquid which contains any quantity of methamphetamine, including its salts, isomers, and salts of isomers.

SCHEDULE III

(a) Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a stimulant effect on the central nervous system:

(1) Amphetamine, its salts, optical isomers, and salts of its optical isomers.

(2) Phenmetrazine and its salts.

(3) Any substance (except an injectable liquid) which contains any quantity of methamphetamine, including its salts, isomers, and salts of isomers.

(4) Methylphenidate.

(b) Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation which contains any quantity of the following substances having a depressant effect on the central nervous system:

(1) Any substance which contains any quantity of a derivative of barbituric acid, or any salt of a derivative of barbituric acid.

(2) Chorhexadol.

(3) Glutethimide.

(4) Lysergic acid.

(5) Lysergic acid amide.

(6) Methyprylon.

(7) Phencyclidine.

(8) Sulfondiethylmethane.

(9) Sulfonethylmethane.

(10) Sulfonmethane.

(c) Nalorphine.

(d) Unless specifically excepted or unless listed in another schedule, any material, compound, mixture, or preparation containing limited quantities of any of the following narcotic drugs, or any salts thereof:

(1) Not more than 1.8 grams of codeine per 100 milliliters or not more than 90 milligrams per dosage unit, with an equal or greater quantity of an isoquinoline alkaloid of opium.

(2) Not more than 1.8 grams of codeine per 100 milliliters or not more than 90 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts.

(3) Not more than 300 milligrams of dihydrocodeinone per 100 milliliters or not more than 15 milligrams per dosage unit, with a fourfold or greater quantity of an isoquinoline alkaloid of opium.

(4) Not more than 300 milligrams of dihydrocodeinone per 100 milliliters or not more than15 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts.

(5) Not more than 1.8 grams of dihydrocodeine per 100 milliliters or not more than 90 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts.

(6) Not more than 300 milligrams of ethylmorphine per 100 milliliters or not more than 15 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts.

(7) Not more than 500 milligrams of opium per 100 milliliters or per 100 grams, or not more than 25 milligrams per dosage unit, with one or more active, nonnarcotic ingredients in recognized therapeutic amounts.

(8) Not more than 50 milligrams of morphine per 100 milliliters or per 100 grams with one or more active, nonnarcotic ingredients in recognized therapeutic amounts.

(e) Anabolic steroids.

SCHEDULE IV

(1) Barbital.

(2) Chloral betaine.

(3) Chloral hydrate.

(4) Ethchlorvynol.

(5) Ethinamate.

(6) Methohexital.

(7) Meprobamate.

(8) Methylphenobarbital.

(9) Paraldehyde.

(10) Petrichloral.

(11) Phenobarbital.

SCHEDULE V

Any compound, mixture, or preparation containing any of the following limited quantities of narcotic drugs, which shall include one or more nonnarcotic active medicinal ingredients in sufficient proportion to confer upon the compound, mixture, or preparation valuable medicinal qualities other than those possessed by the narcotic drug alone:

(1) Not more than 200 milligrams of codeine per 100 milliliters or per 100 grams.

(2) Not more than 100 milligrams of dihydrocodeine per 100 milliliters or per 100 grams.

(3) Not more than 100 milligrams of ethylmorphine per 100 milliliters or per 100 grams.

(4) Not more than 2.5 milligrams of diphenoxylate and not less than 25 micrograms of atropine sulfate per dosage unit.

(5) Not more than 100 milligrams of opium per 100 milliliters or per 100 grams.

3. 21 U.S.C. 813 provides:

Treatment of controlled substance analogues

A controlled substance analogue shall, to the extent intended for human consumption, be treated, for the purposes of any Federal law as a controlled substance in schedule I.

4. 21 U.S.C. 841 provides in pertinent part:

(a) Unlawful acts

Except as authorized by this subchapter, it shall be unlawful for any person knowingly or intentionally—

(1) to manufacture, distribute, or dispense, or possess with intent to manufacture, distribute, or dispense, a controlled substance; or

(2) to create, distribute, or dispense, or possess with intent to distribute or dispense, a counterfeit substance.

(b) Penalties

Except as otherwise provided in section 849, 859, 860, or 861 of this title, any person who violates subsection (a) of this section shall be sentenced as follows:

(1)(A) In the case of a violation of subsection (a) of this section involving—

(i) 1 kilogram or more of a mixture or substance containing a detectable amount of heroin;

(ii) 5 kilograms or more of a mixture or substance containing a detectable amount of—

(I) coca leaves, except coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed;

(II) cocaine, its salts, optical and geometric isomers, and salts of isomers;

(III) ecgonine, its derivatives, their salts, isomers, and salts of isomers; or

(IV) any compound, mixture, or preparation which contains any quantity of any of the substances referred to in subclauses (I) through (III);

(iii) 50 grams or more of a mixture or substance described in clause (ii) which contains cocaine base;

* * * * *

such person shall be sentenced to a term of imprisonment which may not be less than 10 years or more than life * * *

(B) In the case of a violation of subsection (a) of this section involving—

(i) 100 grams or more of a mixture or substance containing a detectable amount of heroin;

(ii) 500 grams or more of a mixture or substance containing a detectable amount of—

(I) coca leaves, except coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed;

(II) cocaine, its salts, optical and geometric isomers, and salts of isomers;

(III) ecgonine, its derivatives, their salts, isomers, and salts of isomers; or

(IV) any compound, mixture, or preparation which contains any quantity of any of the substances referred to in subclauses (I) through (III);

(iii) 5 grams or more of a mixture or substance described in clause (ii) which contains cocaine base;

* * * * *

such person shall be sentenced to a term of imprisonment which may not be less than 5 years and not more than 40 years * * *

(C) In the case of a controlled substance in schedule I or II, * * * such person shall be sentenced to a term of imprisonment of not more than 20 years * * *