



Tendencias sobre Percusores Químicos: Perspectiva de EE.UU.

Liqun L. Wong

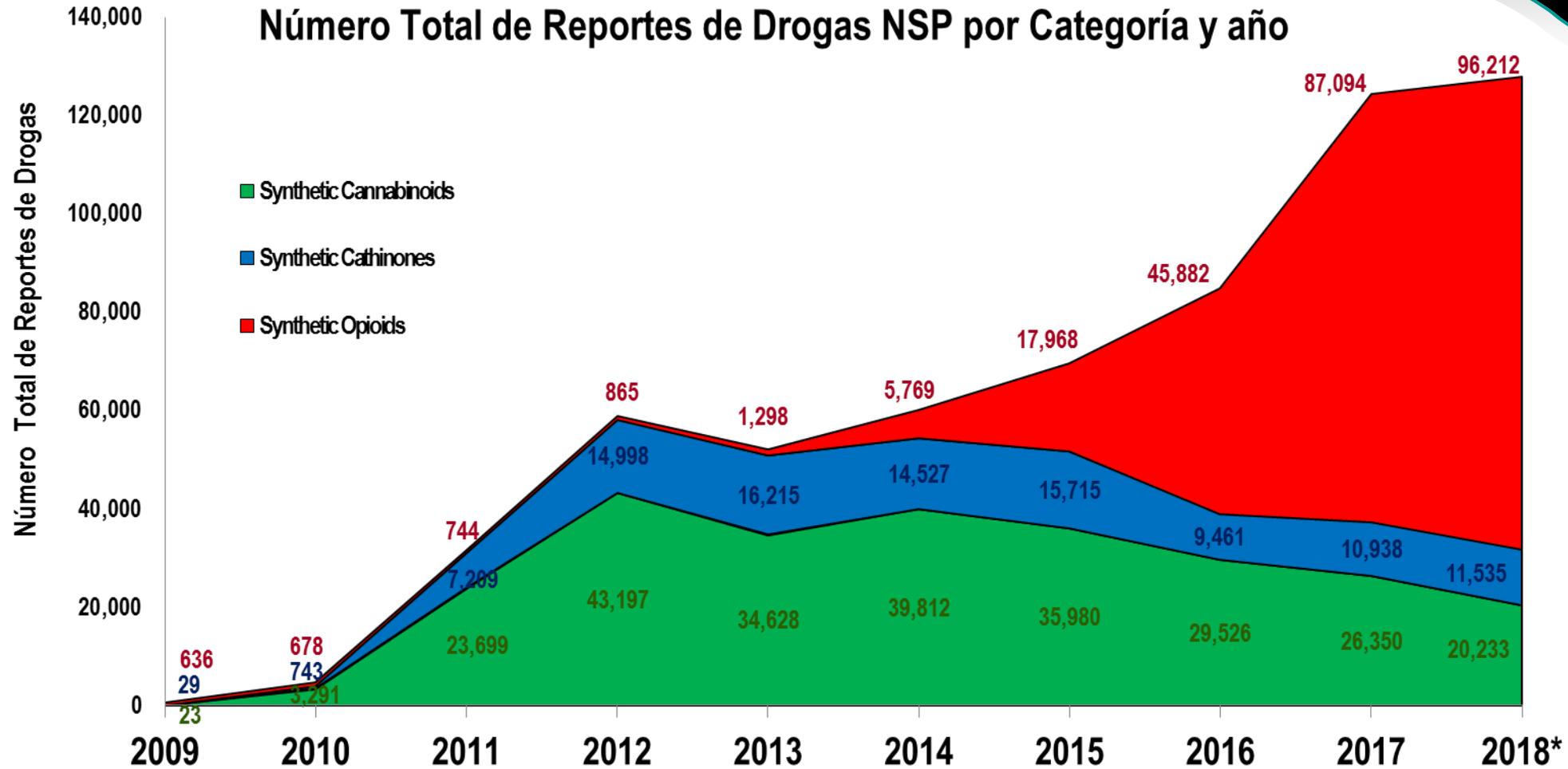
Jefe de Unidad

Sección de Evaluación de Drogas y Químicos

División de Control de Desvío

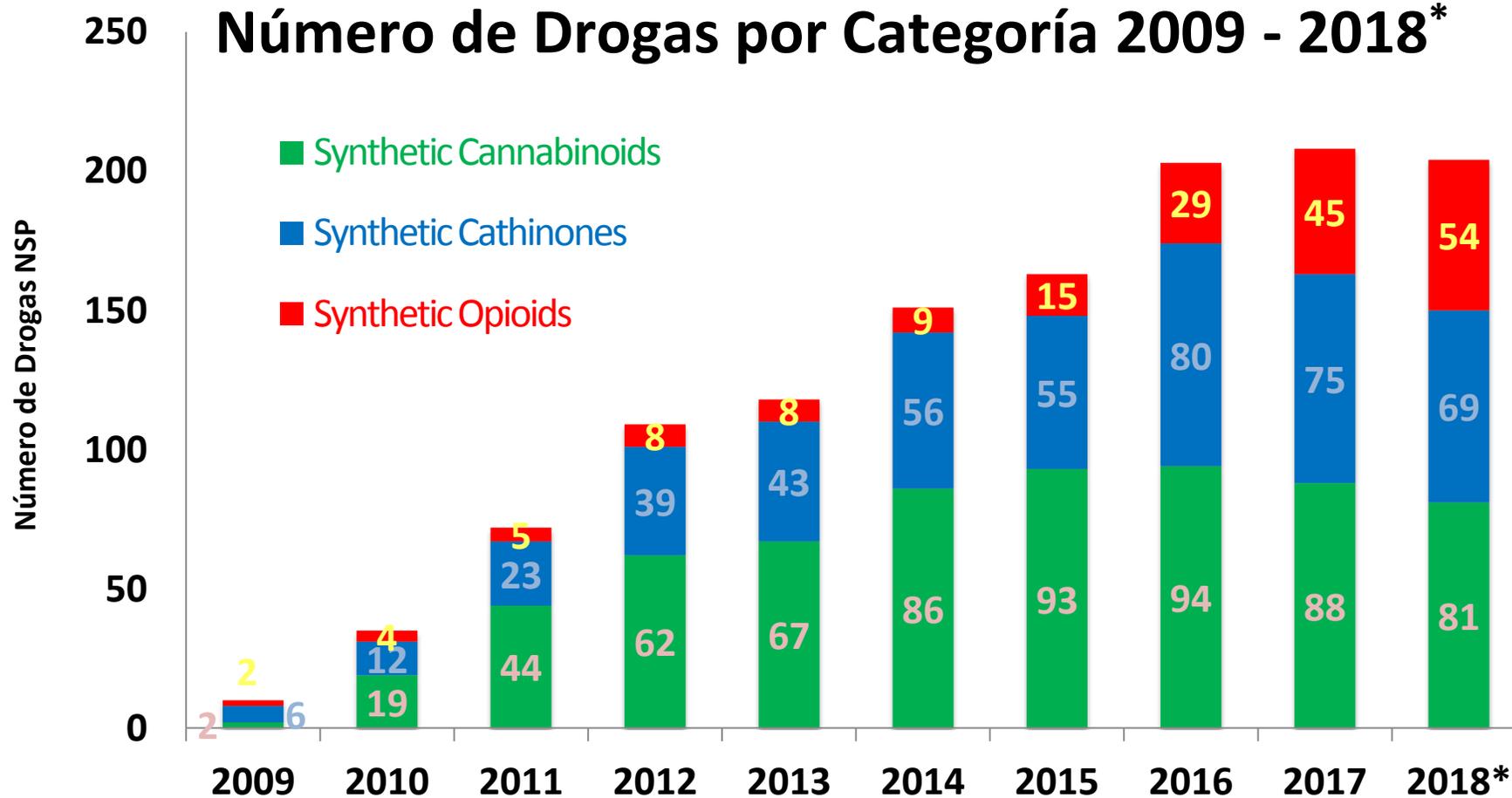
Administración de Control de Drogas

Número de NSP Encontradas en EE.UU.



Fuente: Sistema Nacional de Información de Laboratorios Forenses (NFLIS), DEA, consultado a partir del 12 de junio de 2019. * Los informes de NFLIS aún están pendientes

Número de NSP in EE.UU.



- Los informes de NFLIS aún están pendientes.
- Fuente: Sistema Nacional de Información de Laboratorios Forenses (NFLIS), DOE / DC / DEA, consultado a partir del 12 de junio de 2019

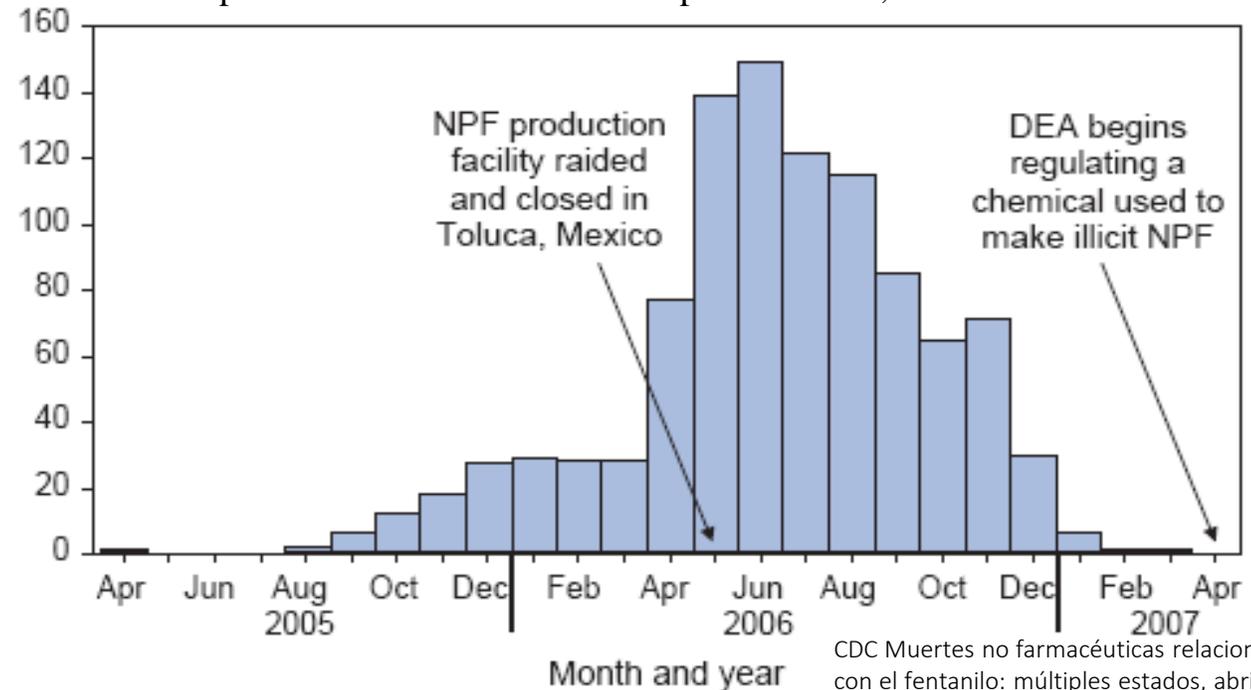
Laboratorio Clandestino de Fentanilo – 2006



- Abril 2005 - marzo 2007: Pico en incautaciones de fentanilo
- Mas de **1013** muertes por sobredosis no-farmacéuticas
- Principal ruta sintética identificada como el **método Siegfried**

- *N-Fenetil-4-piperidona (NPP) incluido como químico en el Cuadro I en el 2017*
- *4-Anilino-N-fenetilpiperidina (ANPP) incluido como precursor inmediato Lista II en 2010*

Epidemia de Sobredosis Fatales por Fentanilo, 2005-2007



CDC Muertes no farmacéuticas relacionadas con el fentanilo: múltiples estados, abril de 2005 a marzo de 2007. MMWR 2008; 57: 793-6.



Laboratorio Clandestino de Fentanilo - 2016



* EVERYTHING DRY & ARGON

ANPP + TEA + DCM IN
DRY FLASK, STIR UNDER ARGON, 100
MIN

TRANSFER Propargyl Cl TO
ADD IN FLASK AND SOME DRY DCM
TO THIS TO DRY

4-ANPP 41.26 → 710 → 103.15g
TEA 31.2 mL → 36 mL → 53.0g
DCM 100 mL → 750-1000 mL → 1850g
PCCL
PCCL from 200 mL → 45.5 → 167 mL
44.0

ANPP	125g	14g
TEA	100g	7g
DCM	1850g	900 mL
PCCL	100 mL	9.1 PCCL

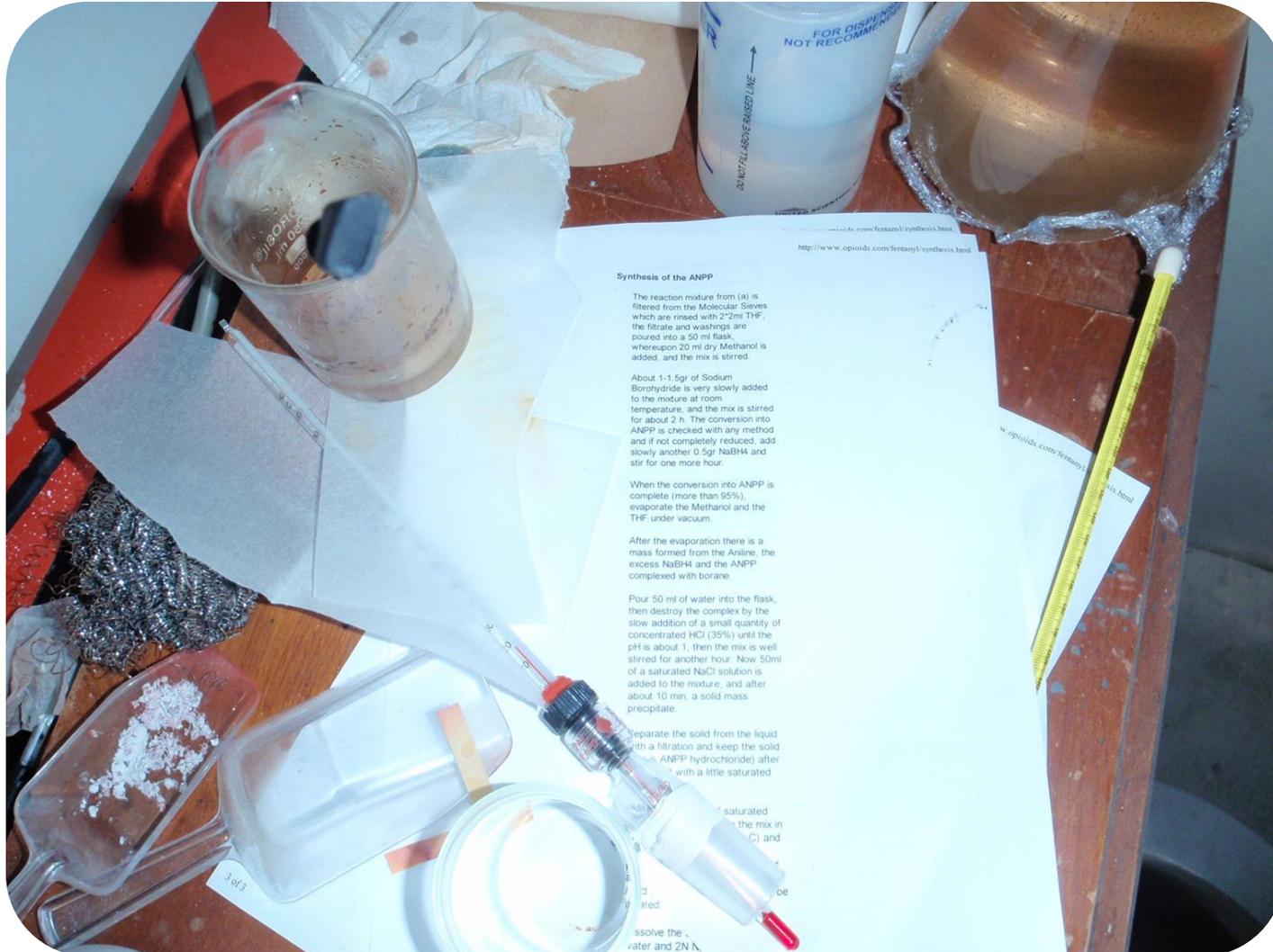


ANPP/4-
ANPP

Operacion de Prensas de Pastillas Clandestinas



Síntesis de Fentanilo – Ruta de Siegfried



Synthesis of the ANPP

The reaction mixture from (a) is filtered from the Molecular Sieves which are rinsed with 2*2ml THF, the filtrate and washings are poured into a 50 ml flask, whereupon 20 ml dry Methanol is added, and the mix is stirred.

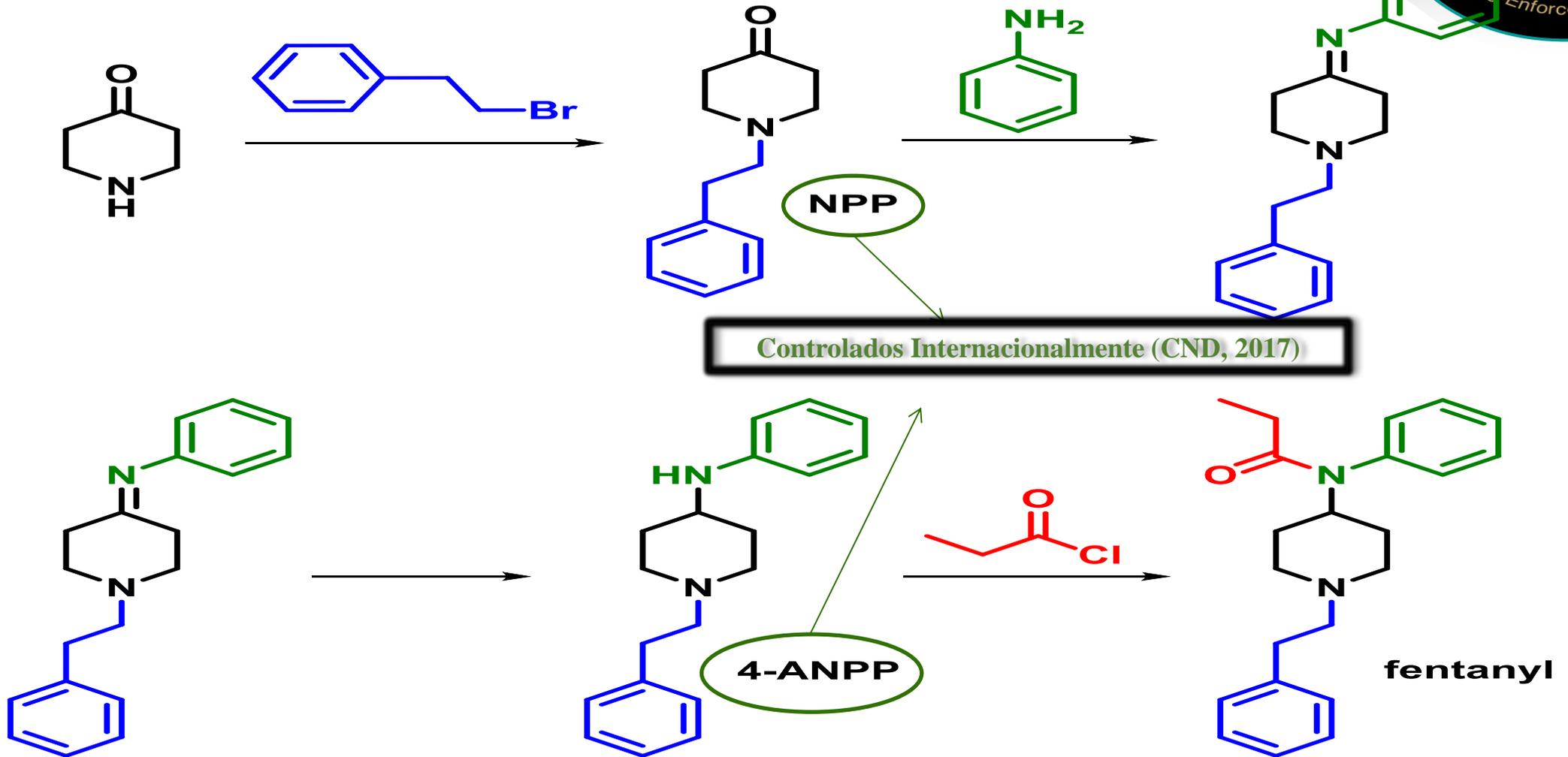
About 1-1.5gr of Sodium Borohydride is very slowly added to the mixture at room temperature, and the mix is stirred for about 2 h. The conversion into ANPP is checked with any method and if not completely reduced, add slowly another 0.5gr NaBH4 and stir for one more hour.

When the conversion into ANPP is complete (more than 95%),

Opioides Sintéticos en Tabletas Falsificadas



Control de Precursores Químicos



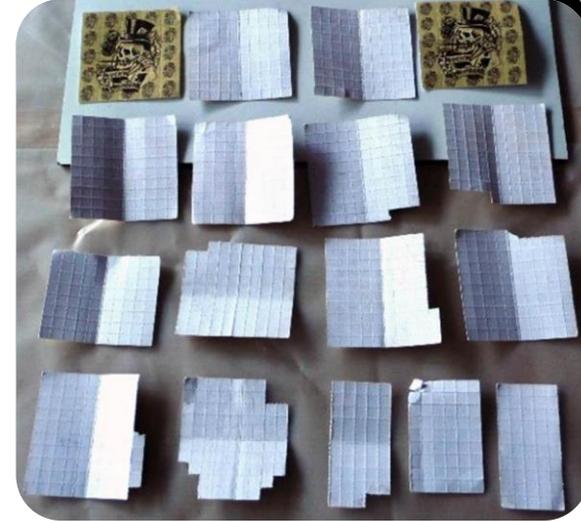
Varios Métodos de Entrega



Atomizador de
fentanilo
ciclopropano



Aerosol nasal de fentanilo



Carfentanilo sobre papel secante

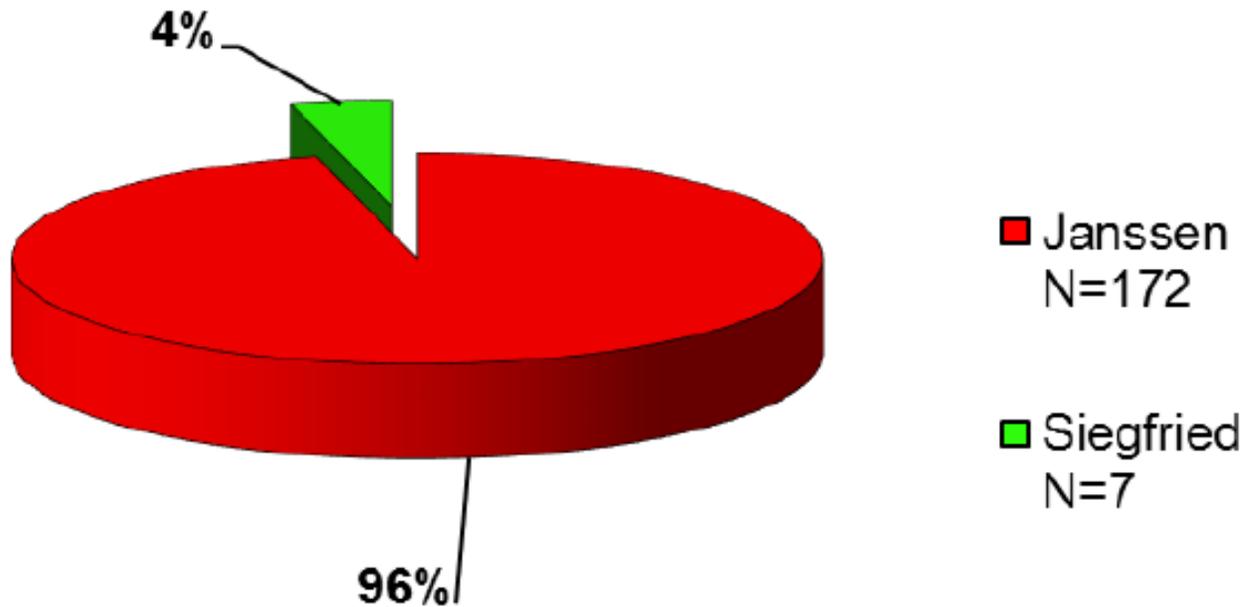


Fallecido dio
positivo
para acetil fentanilo

Programa de los EE.UU. de Caracterización y Perfilación de Fentanilo



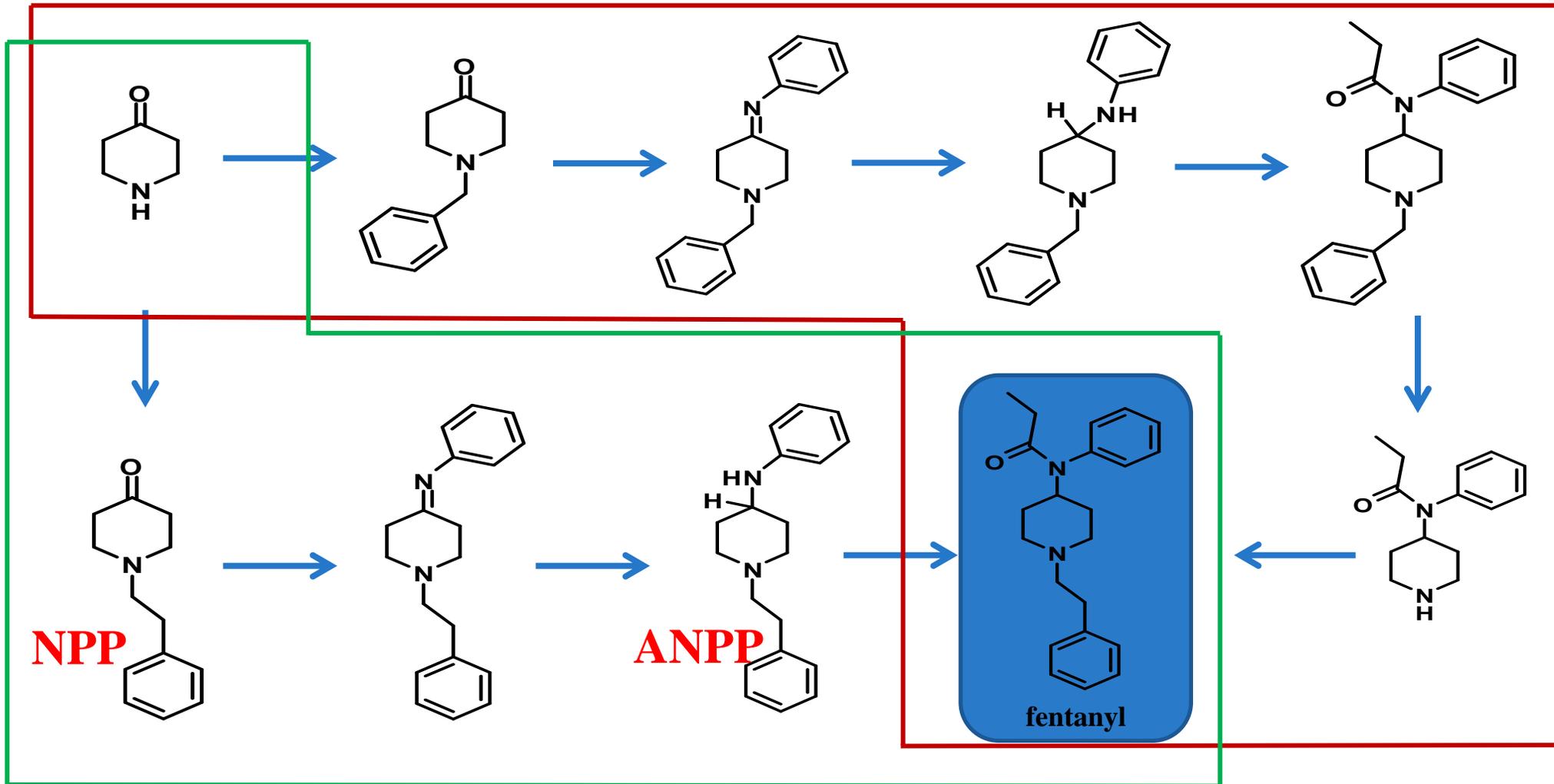
Synthetic Route Determined for Fentanyl Seized in CY 2018



Análisis de Síntesis de Fentanilo



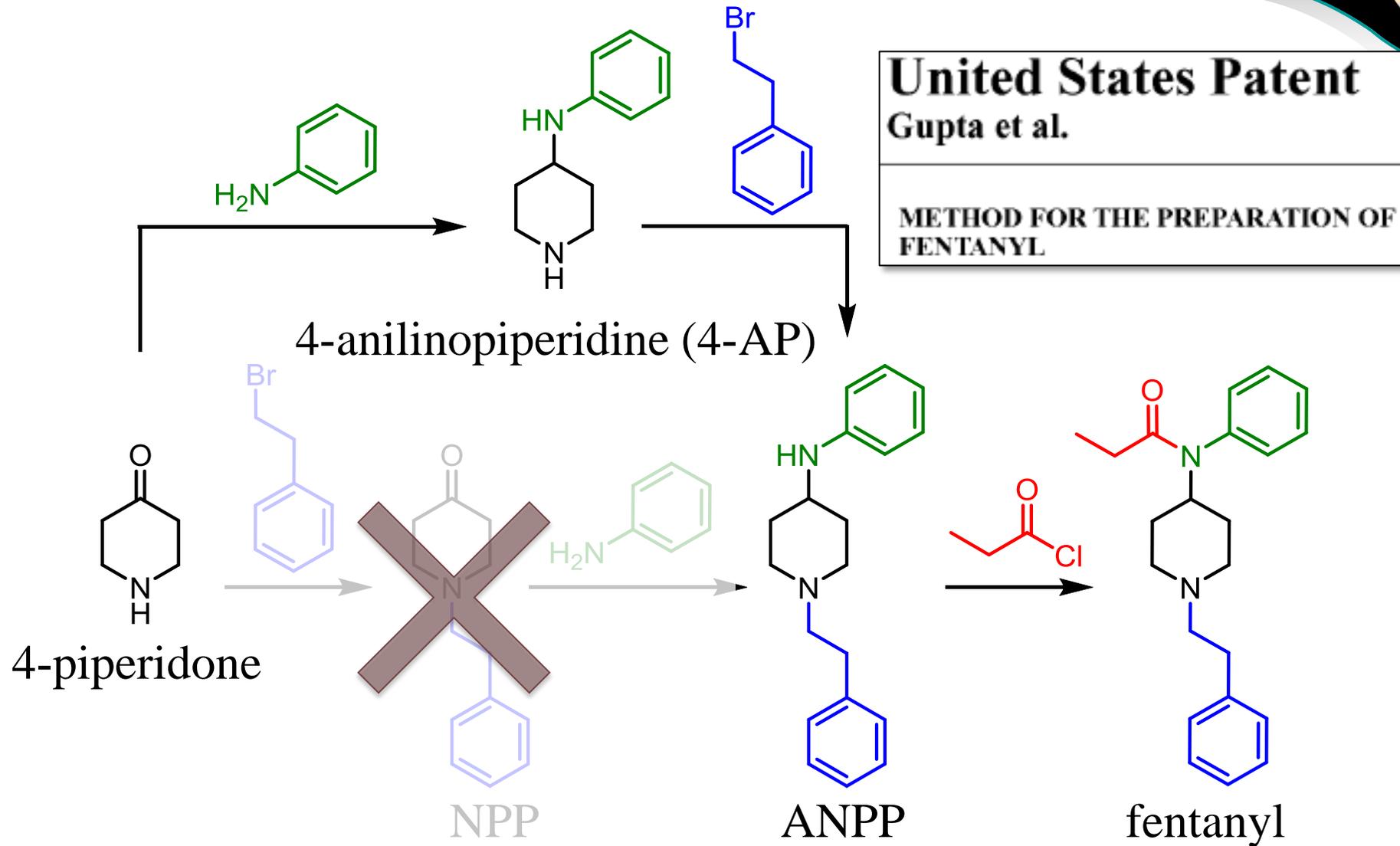
Janssen



Diversion Control Division

Siegfried

Síntesis de Fentanilo - Otros Métodos



Síntesis de Fentanilo – Nuevos Precursores



- Nuevo método utiliza una sustancia llamada **4-AP** en lugar de NPP
- La JIFE reporto 32 notificaciones (finales 2018 – inicios 2019) representando **30 kg de 4-AP**
- Origen: China, Hong Kong, Holanda, Singapur, India
- Destino: México

30 kg de 4-AP
pueden producir
57 kg de
fentanilo!



Picture 1+2 (© PGR Mexico)



Country of origin: China
Goods declared: snacks

Declarados falsamente como “alimentos o consumibles”, “regalos”, “sin especificar”, “botellas de vidrio” y “proteínas”

Precursor de Fentanilo - Empaque



Picture 12 (© PGR Mexico)
Country of origin: China
Goods declared: n/a



Picture 14 (© PGR Mexico)
Country of origin: China
Goods declared: protein



Picture 10 (© PGR Mexico)
Country of origin: Netherlands
Goods declared: glass bottles

Los Proveedores Ayudan a Evadir la Detección de Aduanas



“**paquete discreto:** los empaques que mejor se adapten serán elegidos para cruzar aduanas de manera segura, o si tienes tu propia forma ideal, también podría ser tomada en consideración”.

“garantía de seguridad (hacemos este negocio hace mucho tiempo, **sabemos cómo disimular y que el producto cruce por aduanas**”

“nuestra compañía promete entregar el paquete a los clientes en sus manos de manera segura, o **cubriremos la pérdida total y la reenviaremos el producto a tiempo**”.



Customer feedback that the 99918-43-1 with high quality and perfect packaging (+86 18034552304)

11 views

👍 0 🗨️ 0 ➦ SHARE ⌵ SAVE ...

Cathy Han

Published on May 24, 2019

SUBSCRIBE 1

CAS 99918-43-1, CAS 62-44-2 Phenacetin, bmk glycidate CAS 37148-48-4, CAS 37148-47-3, CAS 99-92-3 4-Aminoacetophenone, CAS 40064-34-4 4-Piperidone Hydrochloride Monohydrate, CAS 103-81-1, 2-Phenylacetamide, CAS 13605-48-6, PMK powder, CAS 103-63-9, (2-Bromoethyl)benzene, CAS 2f-dck, 5fadb, NDH, HGH

Whatsapp :008618034552304

Skype:cathy@hbhuanhao.com

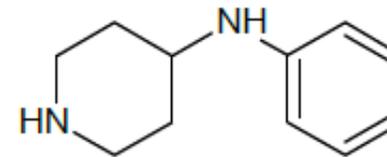
Hebei Huanhao Biotechnology co., Ltd.

Nombres de Precursores Químicos



N-Phenyl-4-piperidinamine is also known under the following common synonyms (list not exhaustive):

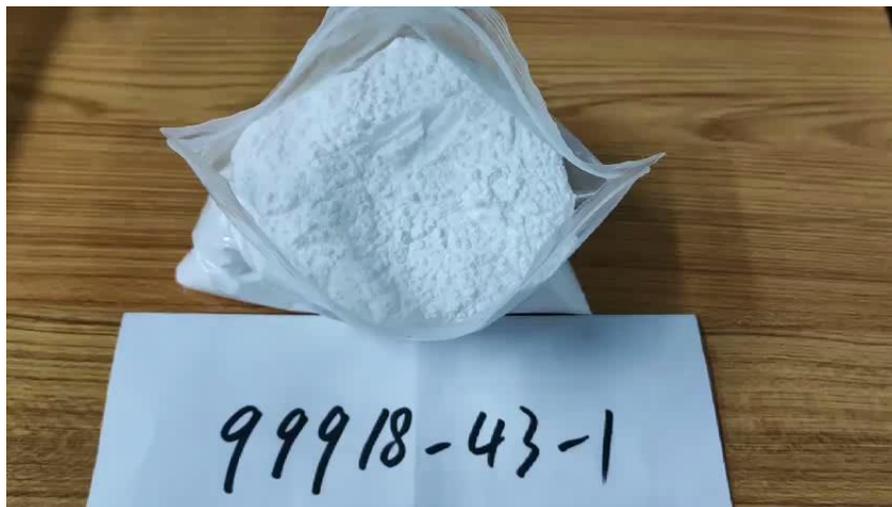
- *N*-Phenylpiperidin-4-amine
- 4-Anilinopiperidine
- 4-AP
- Despropionyl norfentanyl
- Piperidine, 4-anilino-
- 4-Piperidinamine, *N*-phenyl-
- CAS registry number **23056-29-3**



Desde una alerta internacional de enero de 2019

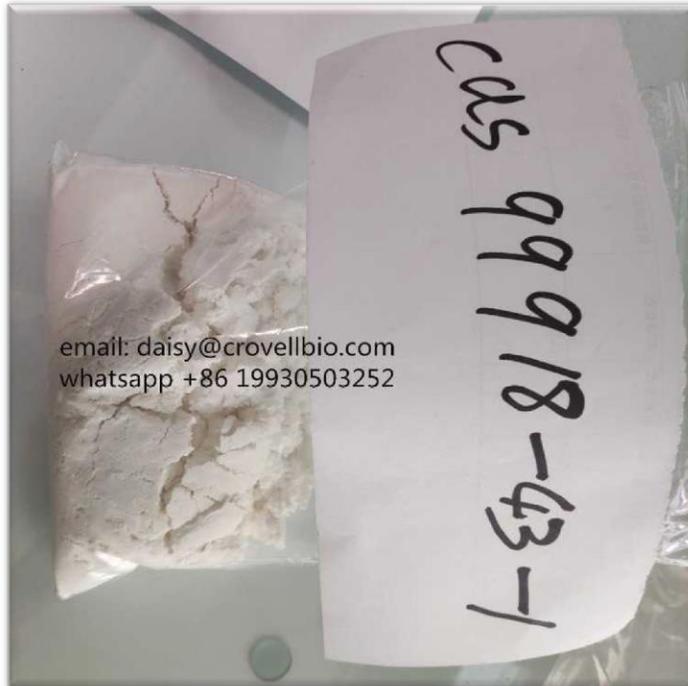
Forma Salina	CAS number
Base	23056-29-3
Clorhidrato(1:1)	1193388-65-6
Bromhidrato(1:1)	24775-80-2
Bromhidrato (1:2)	24998-99-0
4-metilbencenosulfonato (1:?)	918535-64-5
Clorhidrato (1:2)	99918-43-1

Químicos Precursores – Número CAS



Forma salina	CAS number
Base	23056-29-3
Clorhidrato(1:1)	1193388-65-6
Bromhidrato(1:1)	24775-80-2
Bromhidrato (1:2)	24998-99-0
4-metilbencenosulfonato (1:?)	918535-64-5
Clorhidrato (1:2)	99918-43-1

Ventas por Internet – Precursores Químicos



email: daisy@crovellbio.com
whatsapp +86 19930503252

Trade Lead Views: 82



daisylang
Hebei Guanlang Biotechnology Co., Ltd

Dec 11, 2018

★★★★★
[Login to Rate Seller](#)

📞 031166562153
📞 031166562153
📄 [My Other Trade Leads](#)

City: shijiazhuang
Country: China
Trade Specialty: Manufacturer
Industry Category: Chemicals & Plastics

N-PHENYLPYPERIDIN-4-AMINE DIHYDROCHLORIDE

N-PHENYLPYPERIDIN-4-AMINE DIHYDROCHLORIDE CAS 99918-43-1 (daisy@crovellbio.com Factory supply 99% 4-Anilinopiperidine powder, CAS: 99918-43-1 **Fentanyl Intermediates** 4-Anilinopiperidine (hydrochloride) China supplier, hot selling N-Phenylpiperidin-4-Amine Dihydrochloride in stock Email

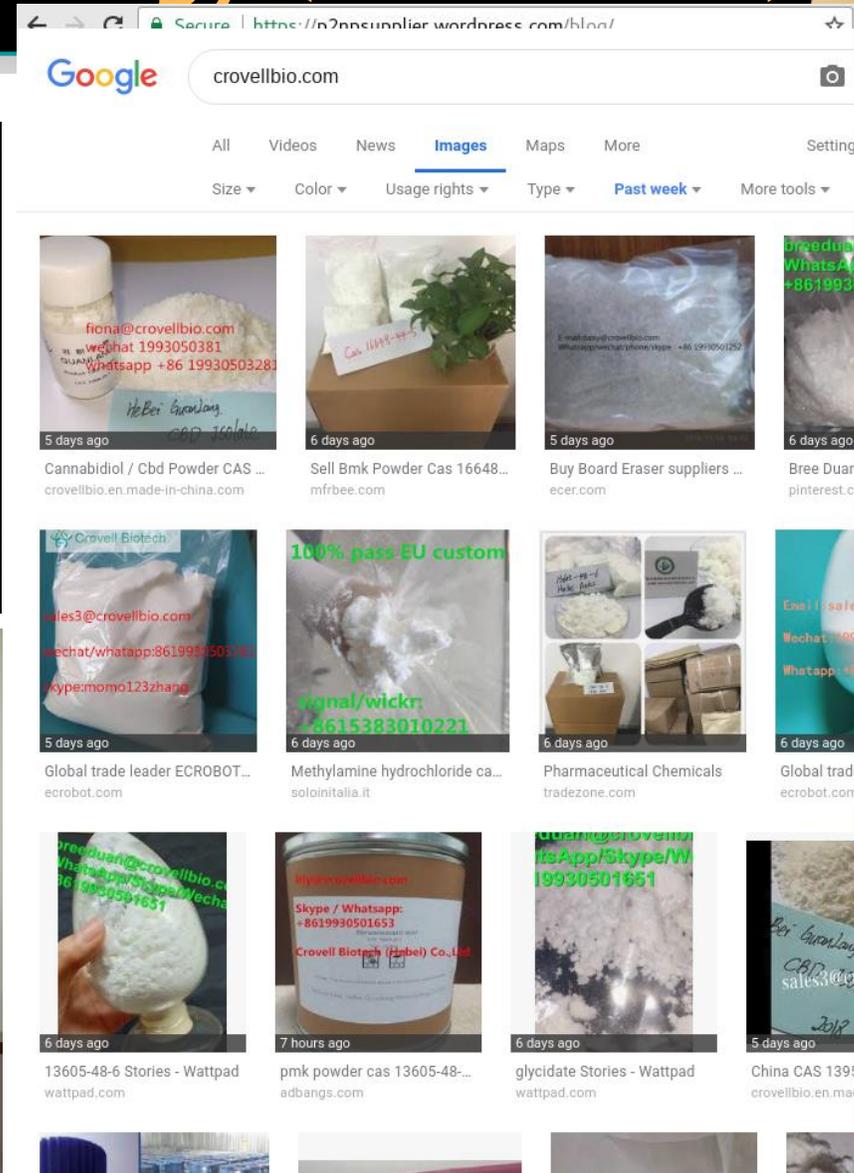
crovellbio.com Factory
4-anilinopiperidine
stock Email
DIHYDROCHLORIDE
-1 Molecular Formula
pharmaceutical PackAge

in 250kgs plastic drum, 20mts/20ftc1 Purity 99% min Storage stay in dry, cool and well-sealed Contact me if you need order the 99918-43-1 Email daisy@crovellbio.com whatsapp +86 19930503252

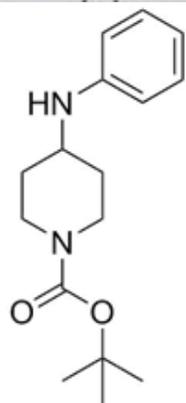
Hebei Guanlang Biotechnology (Crovellbio)



- Todos los productos tienen conexión con el mercado de drogas
 - Precursores de diseño
 - Agentes de corte
 - Solventes no controlados
- La oferta de productos evoluciona con respecto a los controles químicos
- Presencia generalizada en línea
- Mercadeo hace referencia a una “sucursal en México”
- Solo uno de muchos ejemplos

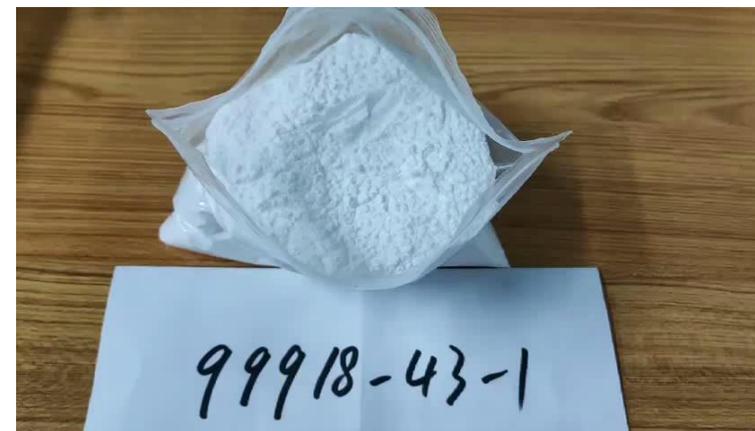


Precursores de Diseño



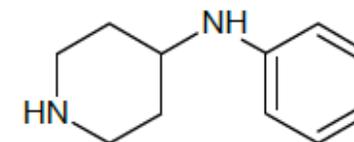
tert-butyl 4-(phenylamino)piperidine-1-carboxylate

Número CAS : **125541-22-2**



N-Phenyl-4-piperidinamine is also known under the following common synonyms (list not exhaustive):

- *N*-Phenylpiperidin-4-amine
- 4-Anilinopiperidine
- 4-AP
- Despropionyl norfentanyl
- Piperidine, 4-anilino-
- 4-Piperidinamine, *N*-phenyl-
- CAS registry number: 23056-29-3



Precursor Enmascarado

factory supply

tert butyl

n boc

carboxylate cas

piperidine

piperidine cas

piperidine 125541

anilinopiperidine

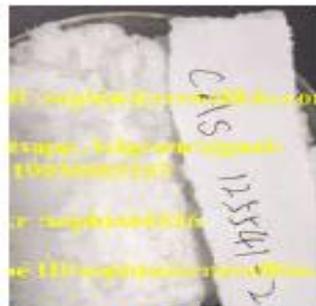
cas 40064



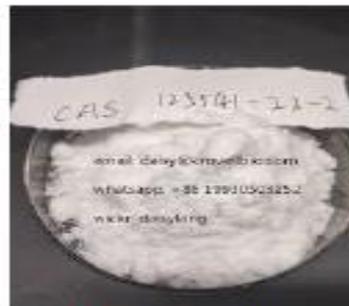
CAS 125541-22-2 tert-...
wattpad.com



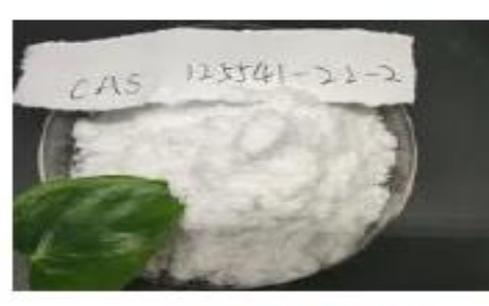
Piperidine CAS 125541-22-2 ...
pharm-china.en.made-in-china.com



cas 125541-22-2 - sop...
wattpad.com



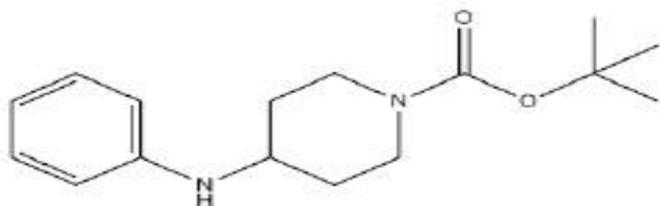
CAS 125541-22- 2N-Boc...
medium.com



China Factory Supply 1-N-Boc-4 ...
crovellbio.en.made-in-china.com



CAS 125541-22-2 tert-Butyl ...
jardeal.com



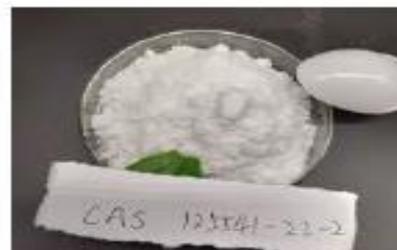
CAS 125541-22-2 N-tert-Butoxycarbonyl-4 ...
802846.jumoreglobal.com



Piperidine CAS 125541-2...
jardeal.com



1-Boc-4-(Phenylamino)Piperidine ...
putfree.com



N-Boc-4-(Phenylamino)Piperi...
crovellbio.en.made-in-china.com



1-Boc-4-(Phenylamino)Piperidine ...
putfree.com



125541-22-2 CAS# 125541-22-2 fact...
jardeal.com



tert-Butyl 4-anilinopiperi...
wattpad.com



N-Boc-4-(Phenylamino)Piperidine ...
crovellbio.en.made-in-china.com



Phenylamino)piperidine cas 125541-22 ...
putfree.com

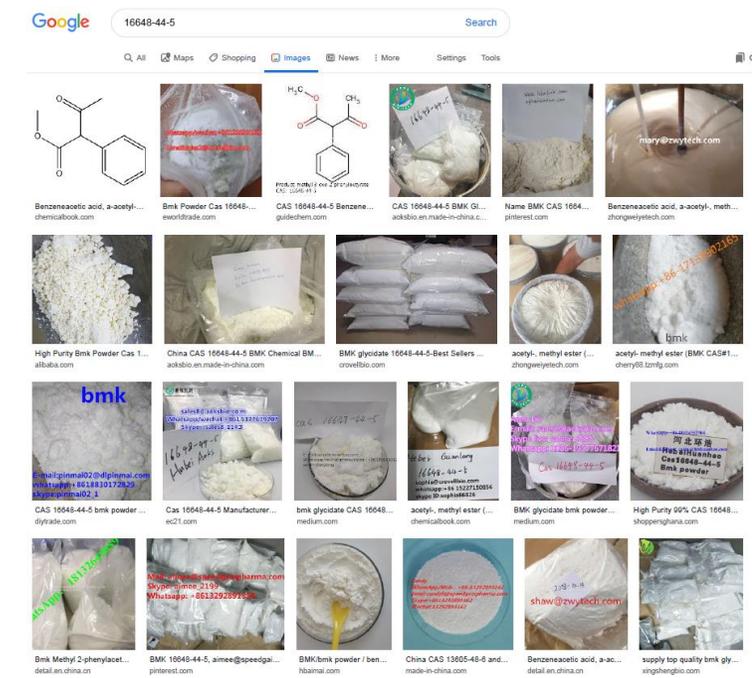
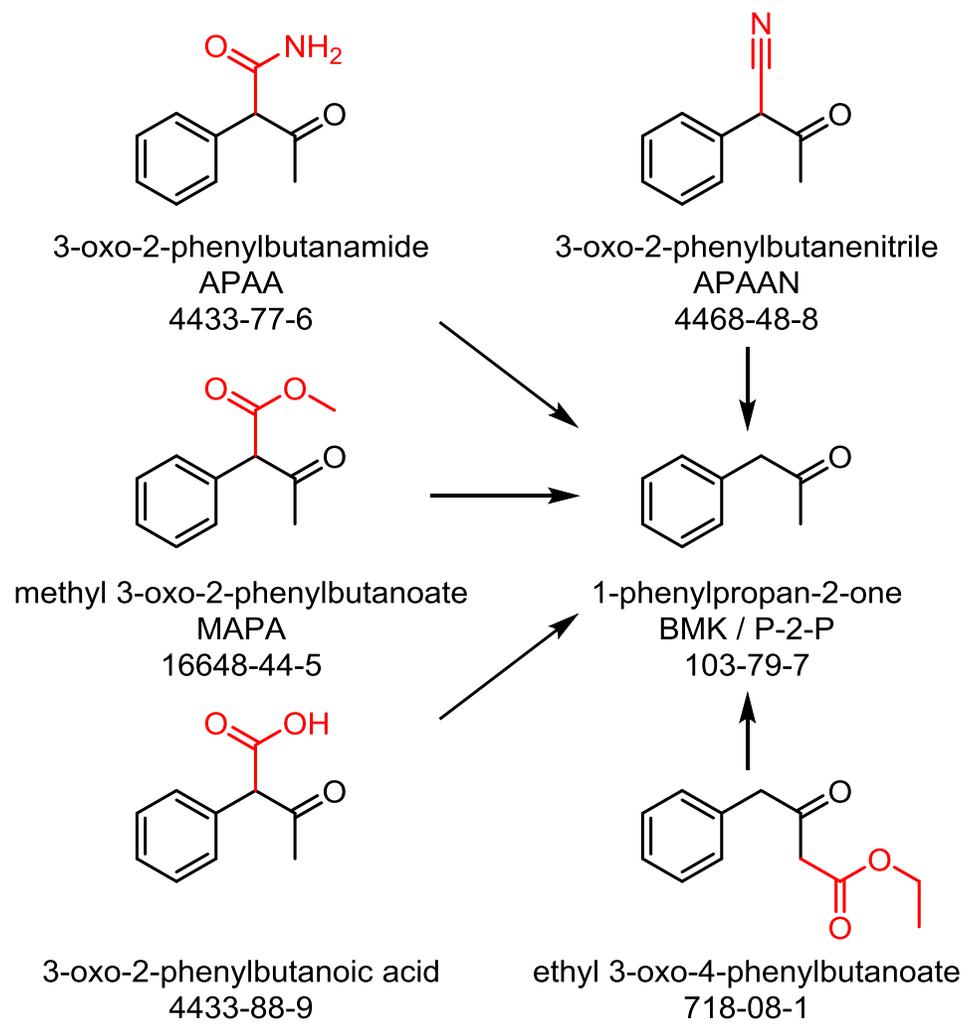


CAS No.125541-22-2,1 ...
lookchem.com

Precursores Químicos de Diseño para Metanfetamina



MAPA
methyl 3-oxo-2-phenylbutanoate
methyl alpha-acetylphenylacetate
CAS 16648-44-5



JIFE sobre Precursores Químicos de “Diseño”



Precursores “de diseño”: Un pariente químico cercano de un precursor controlado que está hecho específicamente para eludir los controles y generalmente no tiene un uso legítimo reconocido

- ❑ Establecido en 2013, en respuesta a la proliferación de precursores “de diseño”
- ❑ La lista contiene actualmente 53 sustancias individuales
- ❑ Expandió la lista de manera genérica

- ❑ ISSL y las definiciones cubren:
 - ✓ ésteres y otros derivados simples
 - ✓ químicos intermedios estables
 - ✓ químicos intermedios hechos a propósito
 - ✓ derivados enmascarados de precursores controlados
 - ✓ otros

Part 7. Non-Scheduled Chemicals

Recommendation	Reference (source)
The Board encourages Governments to ensure that mechanisms are in place to record information on all chemicals found to be used in the illicit manufacture of drugs and not only those scheduled under the 1988 Convention.	(PRE/2004/P83)
INCB wishes to remind Governments of the importance of sharing information about non-scheduled chemicals, their sources, the modus operandi of traffickers and the actual or suspected use of non-scheduled chemicals in illicit drug manufacture. Such information-sharing should start at the national level, when a company receives a suspicious order and reports it to the competent national authorities; and such information should also be shared at the international level, to prevent traffickers from exploiting weak links elsewhere. PICS provides an opportunity for the early sharing of such information worldwide.	(PRE/2015/P102) (PRE/2014/P155) (PRE/2013/P123) (PRE/2012/P159) (PRE/2006/P26)
When substitute chemicals are identified (stopped or seized) in international trade, it is important to communicate widely the reasons why the shipment was stopped or seized so as to alert the relevant authorities — nationally and globally — so that they can identify future shipments routed through different border crossings, ports or countries. Similarly, detailed information on seizures of substitute chemicals in illicit laboratories provides an opportunity for follow-up investigations, identifying those involved and preventing future diversions. The Board therefore urges all Governments to improve the extent, frequency and level of detail of shared information, also in relation to non-scheduled chemicals.	(PRE/2012/P94) (PRE/2012/P159)
Noting similarities in current issues related to precursors and to new psychoactive substances, the Board calls for urgent practical measures to effectively prevent and counter this new and dangerous trend and recommends that Governments support the development of adequate multilateral mechanisms to communicate to INCB incidents involving new psychoactive substances and products containing them, with a view to establishing or confirming emerging trends and contributing to devising early countermeasures.	(AR/2013/R12)
The Board encourages Governments to put in place effective mechanisms for identifying and investigating suspicious transactions involving such non-scheduled substances.	(AR/2007/R18) (PRE/2008/P94) (PRE/2007/P32) (PRE/2007/P89)
The Board wishes to remind Governments that communicating incidents involving new substances that have not previously been encountered in a given jurisdiction may help to establish or confirm new trends and may contribute to the development of countermeasures. Early communication of information about a suspicious shipment or of concerns about a shipment is critical in that it alerts the relevant authorities at the national and international levels so that similar shipments routed through different border crossings, ports or countries can be identified.	(PRE/2013/P151) (AR/2009/R36) (PRE/2005/P81)
All Governments are encouraged to make use of the Board’s updated international special surveillance list of non-scheduled chemicals, which is available to competent national authorities.	(PRE/2009/P112) (PRE/2008/P94) (PRE/2007/P62) (PRE/2007/P89) (PRE/2003/P89)

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U.S. Drug Enforcement Administration

www.deadiversion.usdoj.gov