XIV CONGRESSO NAZIONALE
MILANO 29-30-31 ottobre 2025
PREVENZIONE E CURA DELLE DIPENDENZE
Traguardi raggiunti e nuove prospettive di intervento e di ricerca
Centro Congressi QUARK Hotel Milano
FeDerSerD
Federazione Italiana degli Operatori dei Dipartimenti e dei Servizi delle Dipendenze

UNA DOMANDA SENZA RISPOSTE? TOSSICOLOGIA CLINICA DEGLI PSICOSTIMOLANTI

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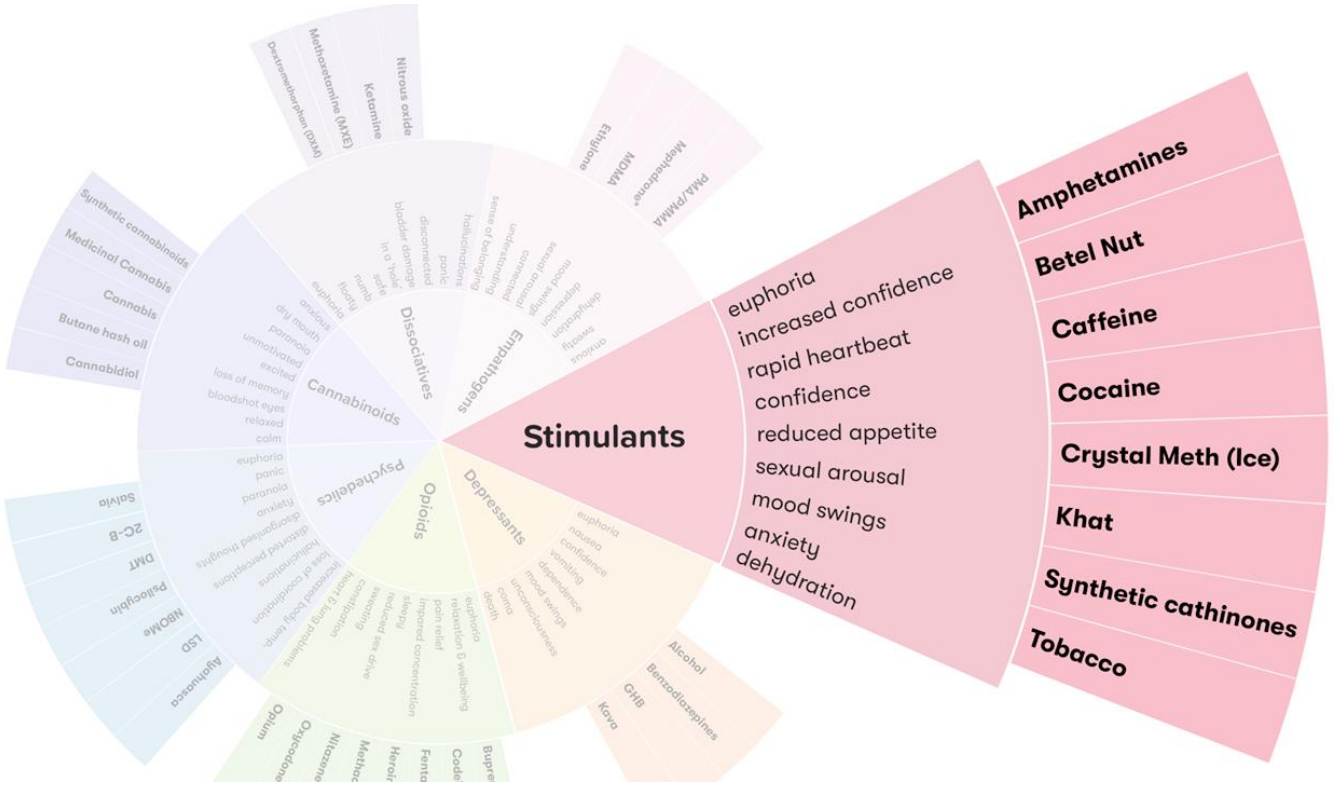
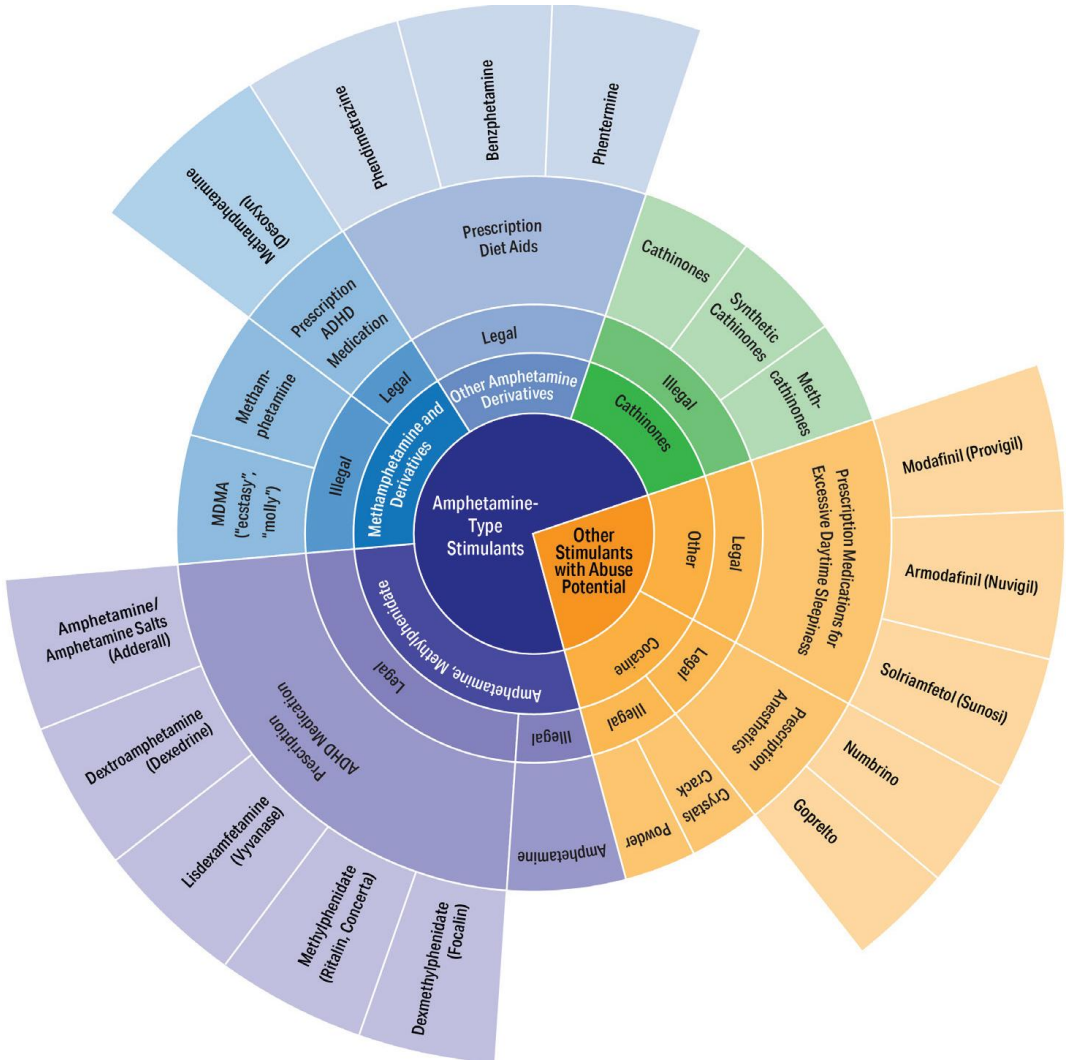
DISCLOSURES

CT Laboratori
Molteni Farmaceutici
Indivior

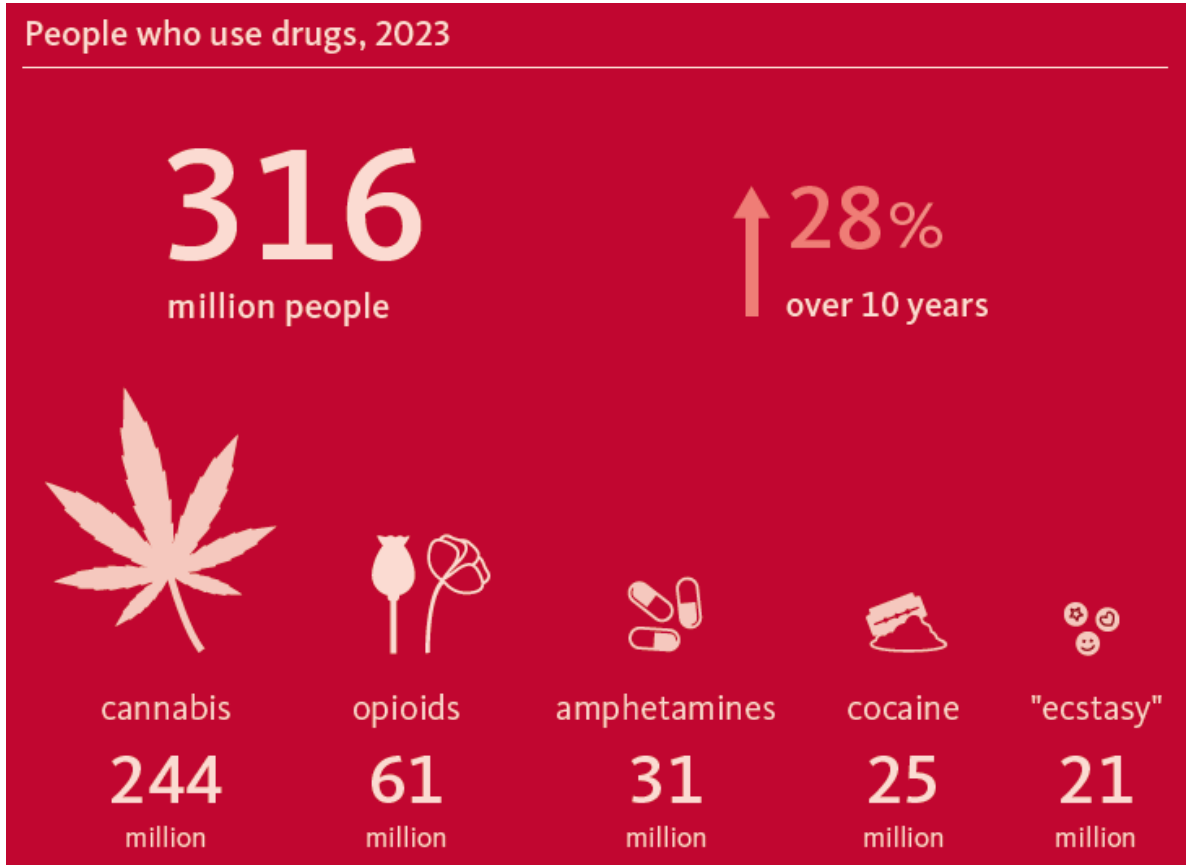
PSICOSTIMOLANTI





https://adf.org.au/drug-facts/stimulants/#wheel (Accessed October 2025); Substance Abuse and Mental Health Services Administration (SAMHSA). Prescription Stimulant Misuse and Prevention Among Youth and Young Adults. Publication No. PEP21-06-01-003. Substance Abuse and Mental Health Services Administration, 2021

LE DIMENSIONI



"Il tempo eccitato degli uomini dell'ovunquità".

"Con l'avvento della droga, le mafie hanno abbracciato le logiche del mercato e del profitto, dando vita ad un business che nel mondo supera i 500 miliardi di dollari, circa 313 miliardi di euro, ovvero un quarto del prodotto interno lordo dell'Italia".

UNODC, World Drug Report 2025 (United Nations publication, 2025); Graziano Martignoni. Cura della dipendenza da cocaina. Indicazioni cliniche e organizzative per il trattamento dei pazienti integrati socialmente. A cura di Antonia Cinquegrana e Tiziana Bussola. Prefazione di Alfio Lucchini, Introduzione di Graziano Martignoni. Franco Angeli Editore. Copyright © 2015 by FrancoAngeli s.r.l., Milano, Italia; Nicola Gratteri, Antonio Nicaso. Oro bianco. Storie di uomini, traffici e denaro dall'impero della cocaina. Anno 2025; Mondadori

LE DIMENSIONI

Global cultivation

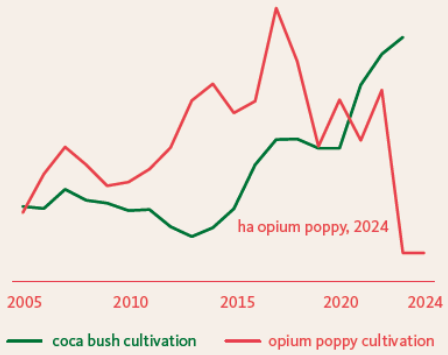
coca bush

6%
between 2022 and 2023

ha coca bush, 2023
376 784

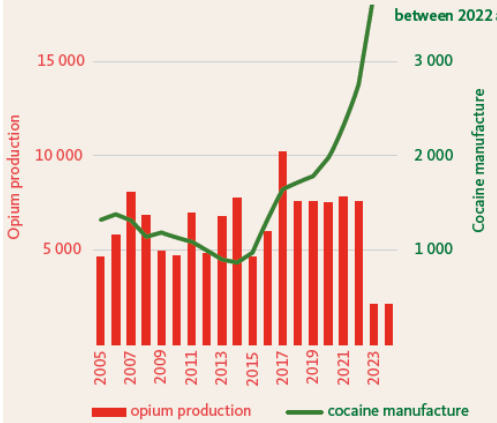
opium poppy

stable
between 2023 and 2024



Global production

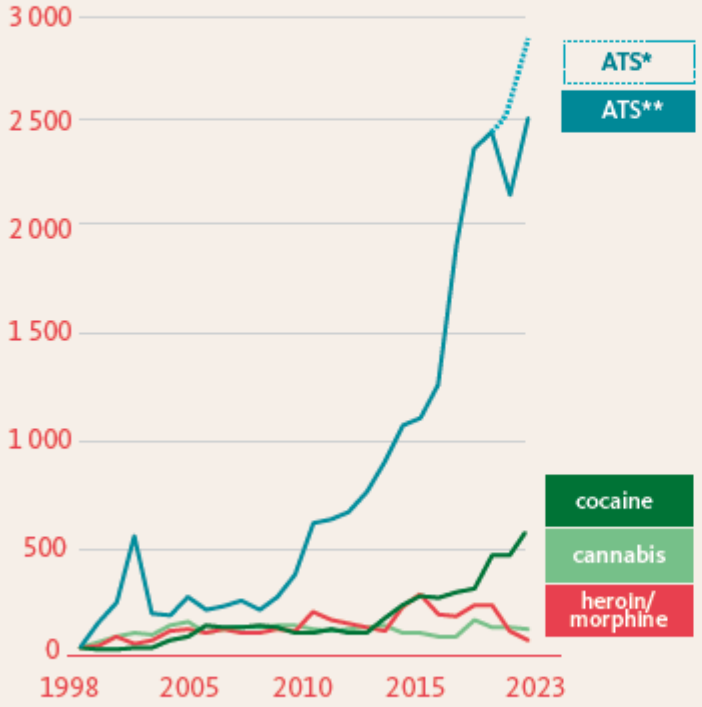
tons of pure cocaine, 2023
3 708 ↑34%
between 2022 and 2023



heroin production
193–211 tons (2024)

tons of opium, 2024
2 140 stable
between 2023 and 2024

Trends in quantity of drugs seized



*ATS assuming that non-reporting country data remain stable.
** ATS as reported.

Global quantities of drugs seized, 2023

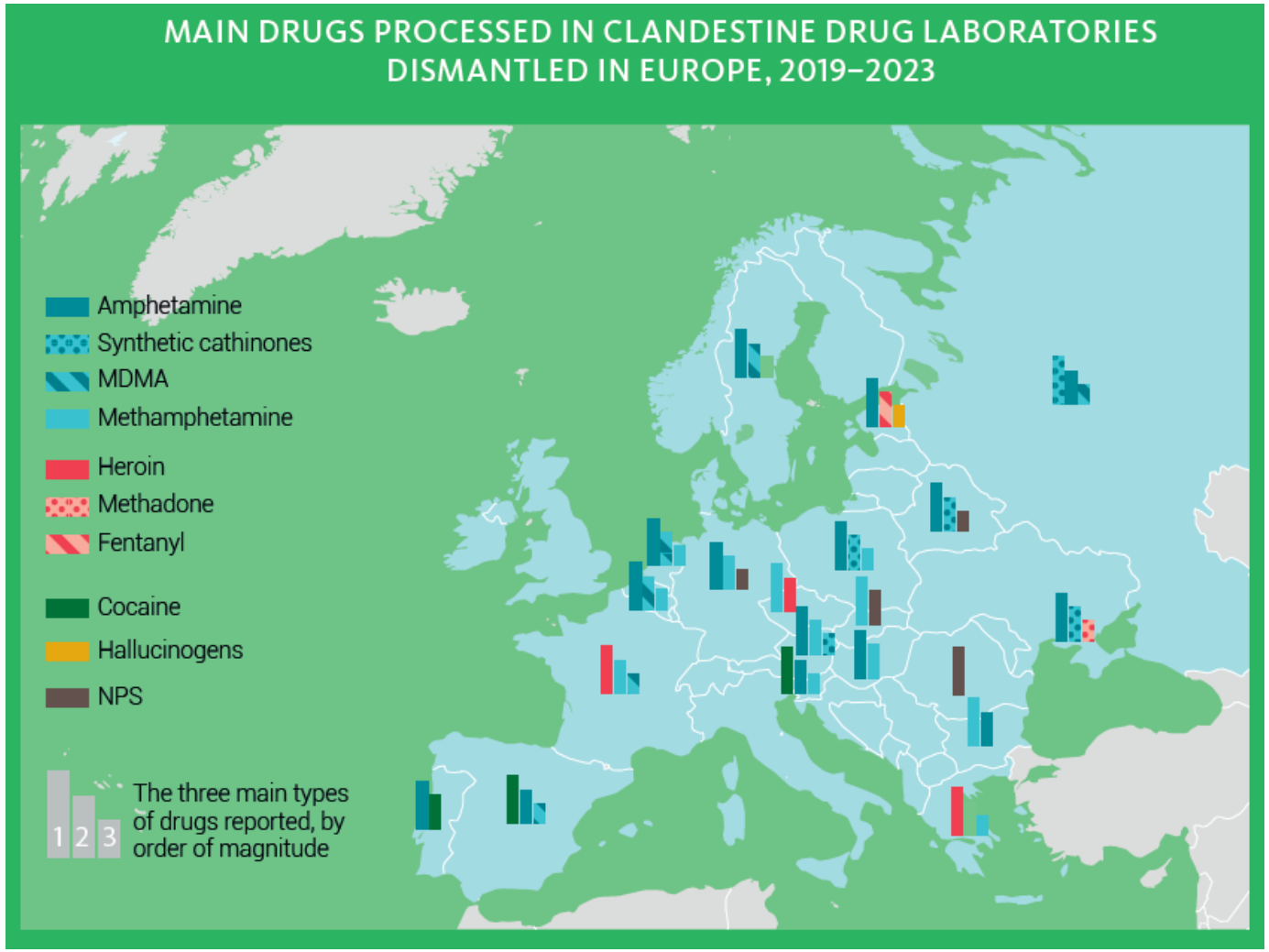
Change from previous year

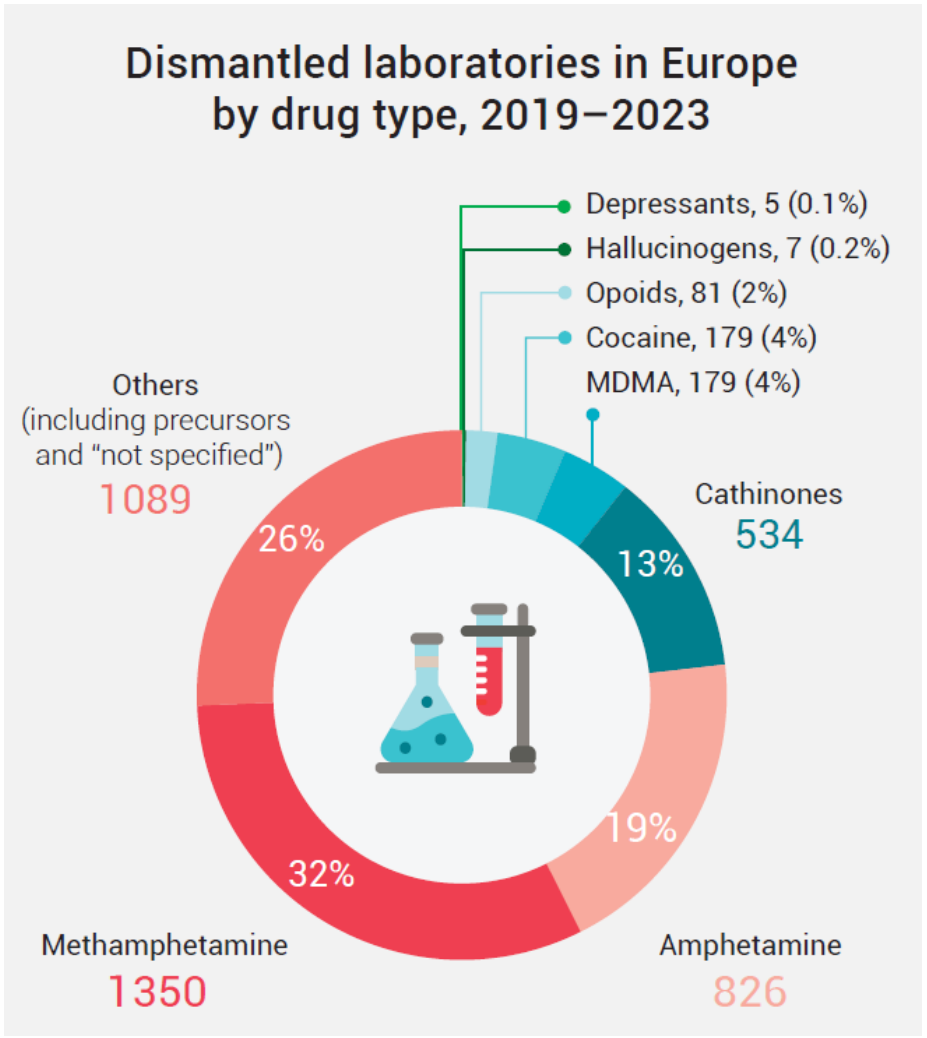
2 275 tons	1 236 tons		5 749 tons
cocaine	cannabis resin		cannabis herb
↑13%	↑4%		↓-8%
15 tons	57 tons	268 tons	471 tons
morphine	heroin	pharmaceutical opioids	opium
↓-31%	↓-25%	↑63%	↓-18%
19 tons	37 tons	109 tons	482 tons
"ecstasy"	other ATS	amphetamine	methamphetamine
↑63%	↓-29%	↓-12%	↑31%

Note: Seizures of amphetamine include estimates for non-reporting countries.

UNODC, World Drug Report 2025 (United Nations publication, 2025)

LE DIMENSIONI





UNODC, World Drug Report 2025 (United Nations publication, 2025)

LABORATORI CLANDESTINI

Lo studente come "Breaking Bad": in casa una fabbrica di droghe

di Giulia D'Aleo

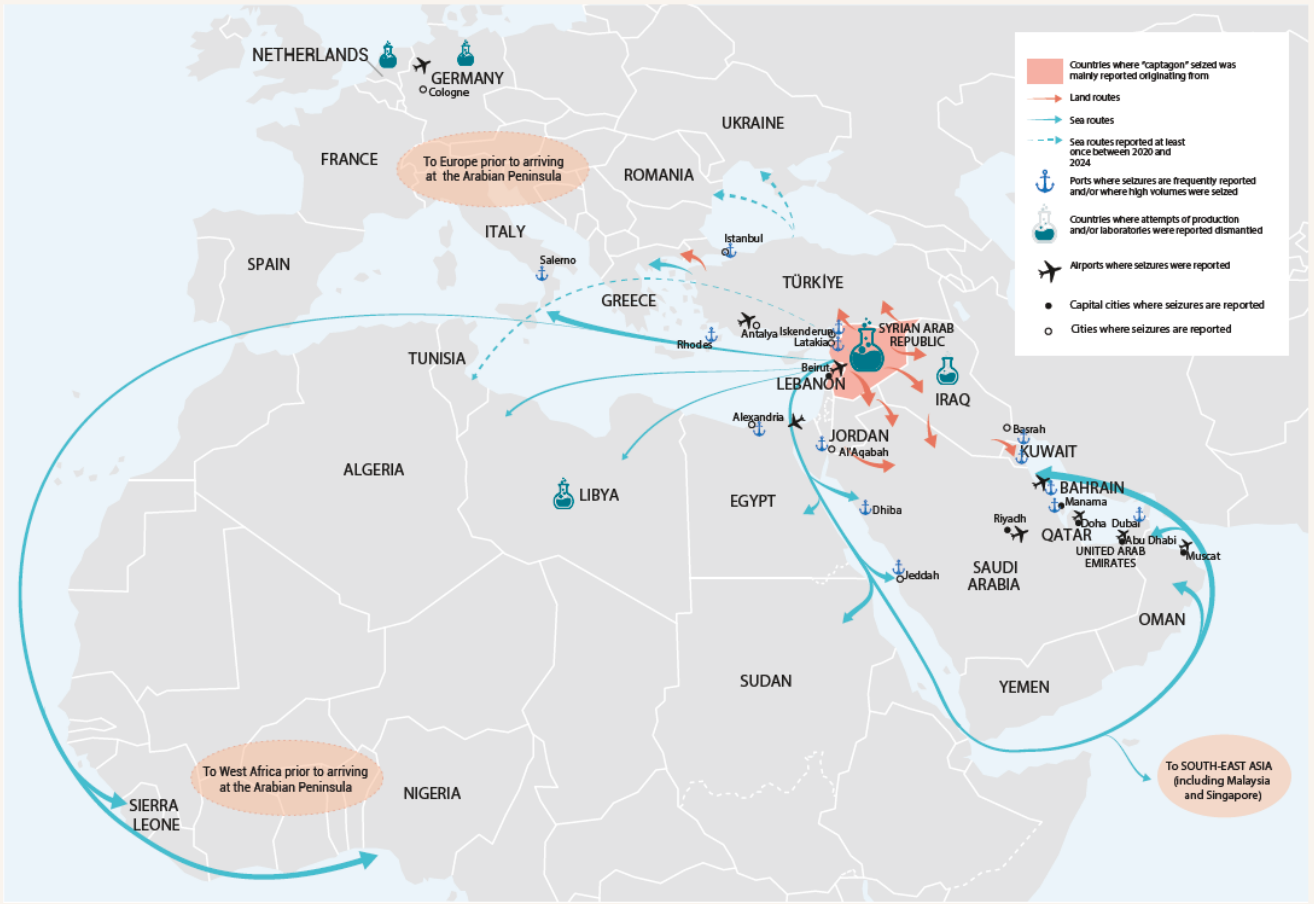
Universitario di Chimica, ventiduenne arrestato a Novara. Il suo laboratorio di metanfetamina era il più attrezzato d'Italia

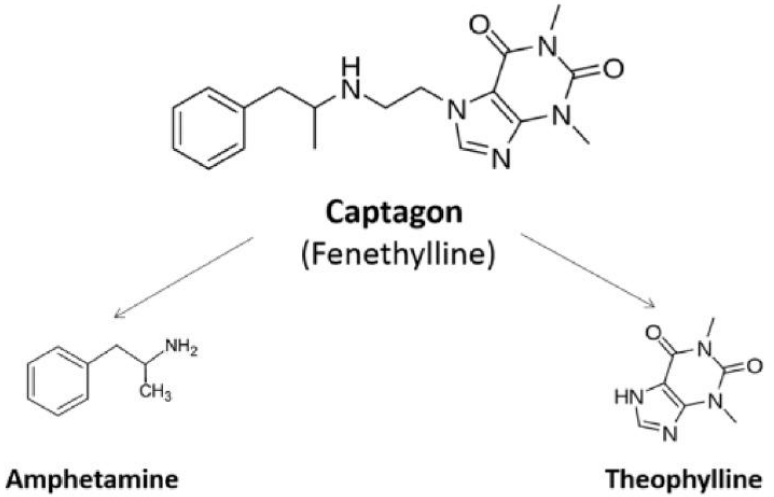
"L'operazione su descritta riveste grande importanza nel panorama europeo, in quanto **le sostanze rinvenute andranno ad implementare le tabelle degli stupefacenti attualmente esistenti nei vari Paesi dell'Unione Europea**, essendo il laboratorio artigianale **tra i più grandi come diversificazione di sostanze stupefacenti prodotte**. All'operazione ha partecipato anche il Gabinetto Interregionale di Polizia Scientifica, Laboratorio di Chimica Forense, Piemonte e Valle d'Aosta la locale Polizia Scientifica".

https://www.tgcom24.mediaset.it/2025/video/novara-polizia-scopre-un-laboratorio-di-produzione-di-droghe-sintetiche_95719498-02k.shtml (Accessed March 2025)
https://www.repubblica.it/cronaca/2025/03/29/news/novara_ragazzo_arrestato_laboratorio_metanfetamine-424093028/ (Accessed March 2025)
https://tg24.sky.it/cronaca/2025/03/28/droga-laboratorio-metanfetamina-novara (Accessed March 2025)

CAPTAGON

Main trafficking routes for counterfeit "captagon", 2020–2024

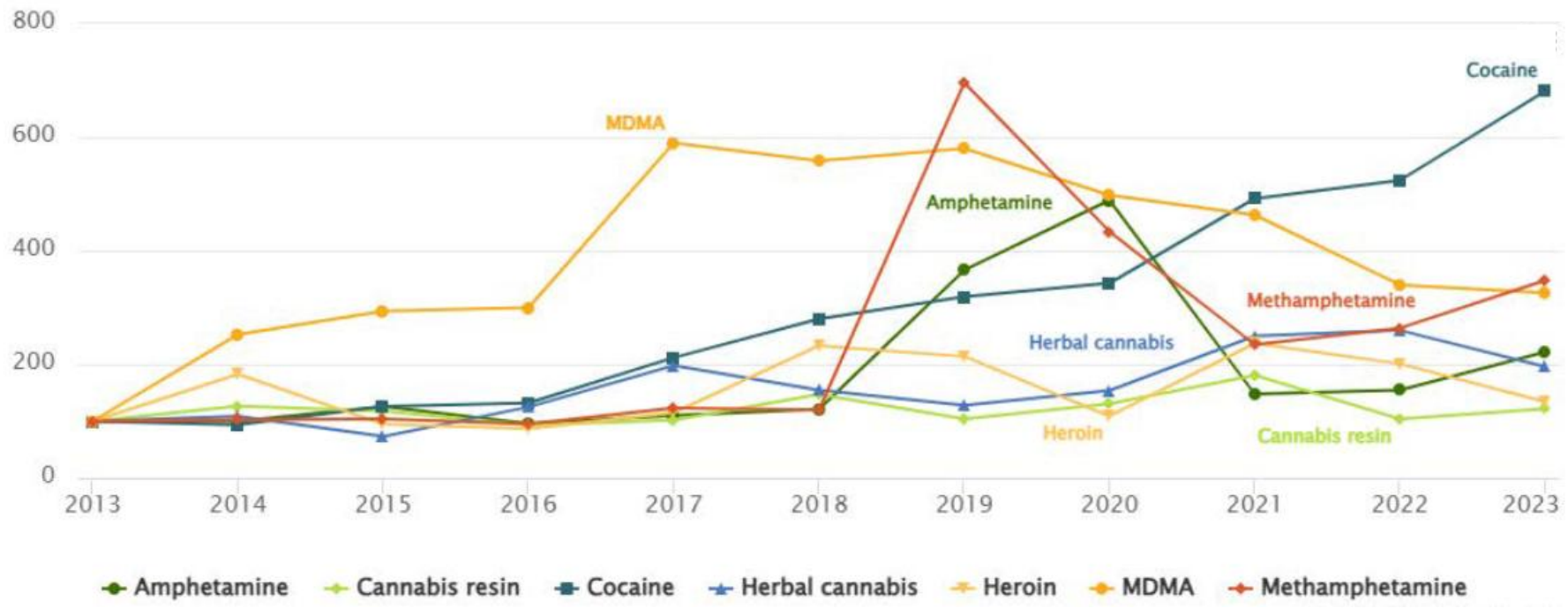




UNODC, World Drug Report 2025 (United Nations publication, 2025); Ogwu MC, Malík M, Tlustoš P, Patočka J. The psychostimulant drug, fenethylline (captagon): Health risks, addiction and the global impact of illicit trade. Drug Alcohol Depend Rep. 2025 Mar 1;15:100323

LE DIMENSIONI

Figure 1.5. Drug seizures in the European Union – quantity of drugs seized, indexed trends (2013 = 100)



European Union Drugs Agency (2025). European Drug Report 2025. Trends and developments

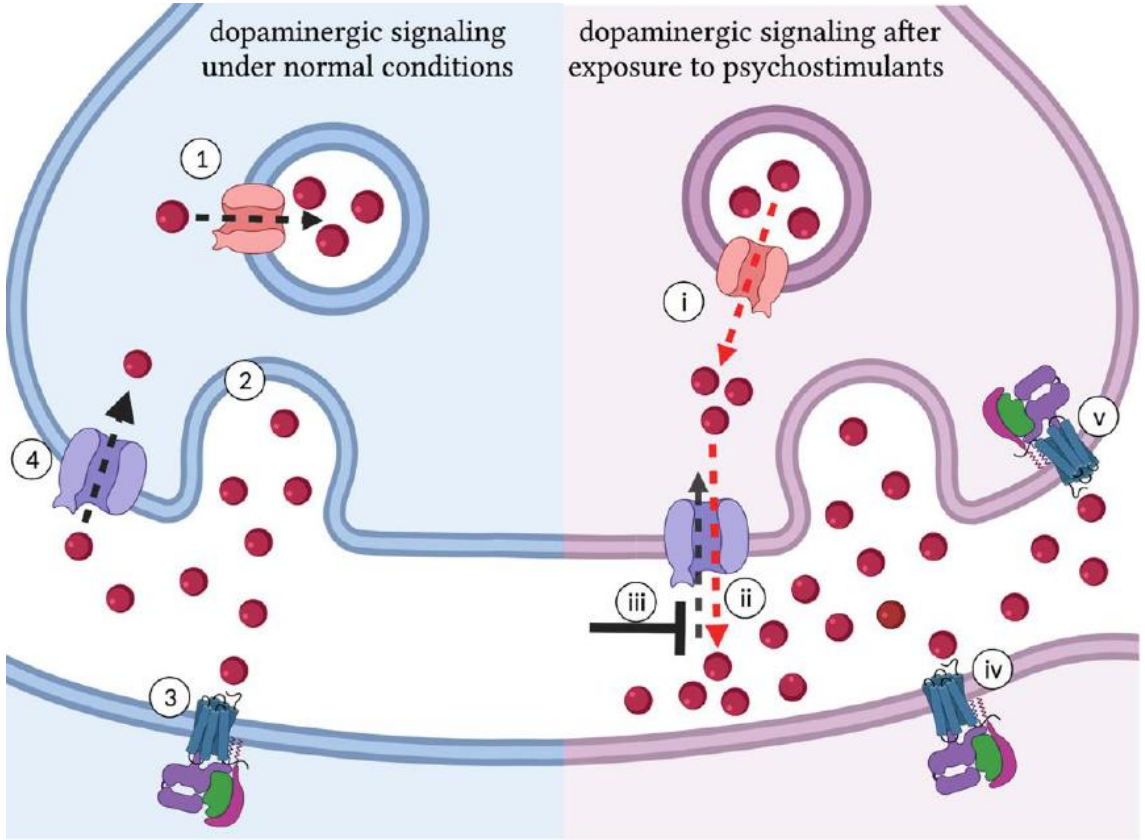
LE DIMENSIONI

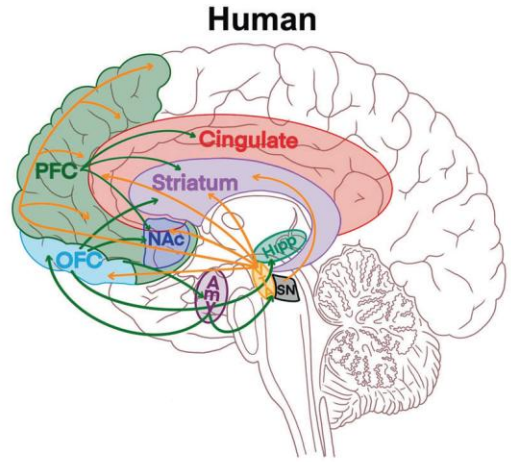
Soggetti in carico presso i SerD secondo la sostanza primaria di trattamento e la sostanza di primo uso. Anno 2024

	Sostanza primaria in trattamento										Totale	
	Eroina		Cocaina		Cannabis*		Crack		Altro			
Sostanza di primo uso	n.	%	n.	%	n.	%	n.	%	n.	%	n.	%
Eroina	48.032	65,0	1.037	3,2	196	1,2	182	4,0	487	8,2	49.934	37,4
Cocaina	3.130	4,2	20.465	62,6	912	5,5	302	6,7	266	4,5	25.075	18,8
Cannabis*	15.554	21,0	6.783	20,7	13.448	81,3	779	17,3	847	14,3	37.411	28,0
Crack	159	0,2	140	0,4	108	0,7	2.804	62,2	19	0,3	3.230	2,4
Sostanze alcoliche	1.680	2,3	2.185	6,7	634	3,8	197	4,4	309	5,2	5.005	3,7
Tabacco	469	0,6	347	1,1	148	0,9	44	1,0	41	0,7	1.049	0,8
Altro	4.904	6,6	1.743	5,3	1.103	6,7	202	4,5	3.958	66,8	11.910	8,9
Totale	73.928	100,0	32.700	100,0	16.549	100,0	4.510	100,0	5.927	100,0	133.614	100,0

Relazione annuale al Parlamento sulle tossicodipendenze in Italia, anno 2025. Presidenza del Consiglio dei Ministri – Dipartimento Politiche Antidroga

PSICOSTIMOLANTI E DOPAMINA





Risk for SUD or for Stimulant SA

MCL Region	DA	Glu
Prefrontal	↑	↓
Striatum/NAc	↓↑	↓
Amygdala	??	↓
Midbrain	↓↑	??

Chronic Stimulant Exposure

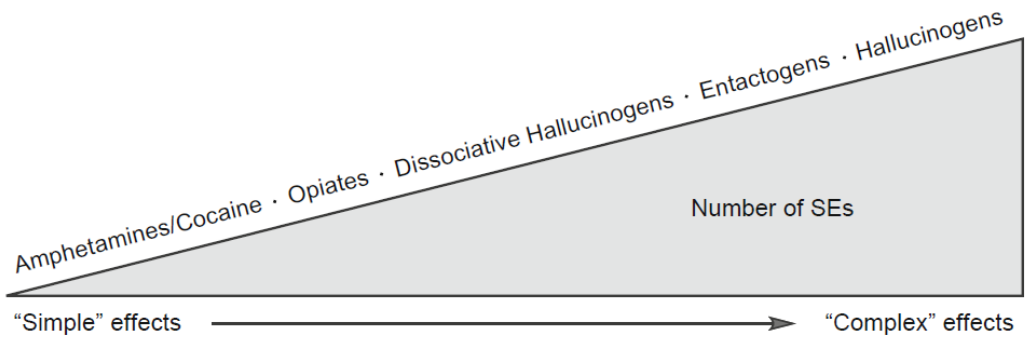
MCL Region	DA	Glu
Prefrontal	??	↓ –
Striatum/NAc	↓↑	↓ –
Amygdala	??	??
Midbrain	↓	??

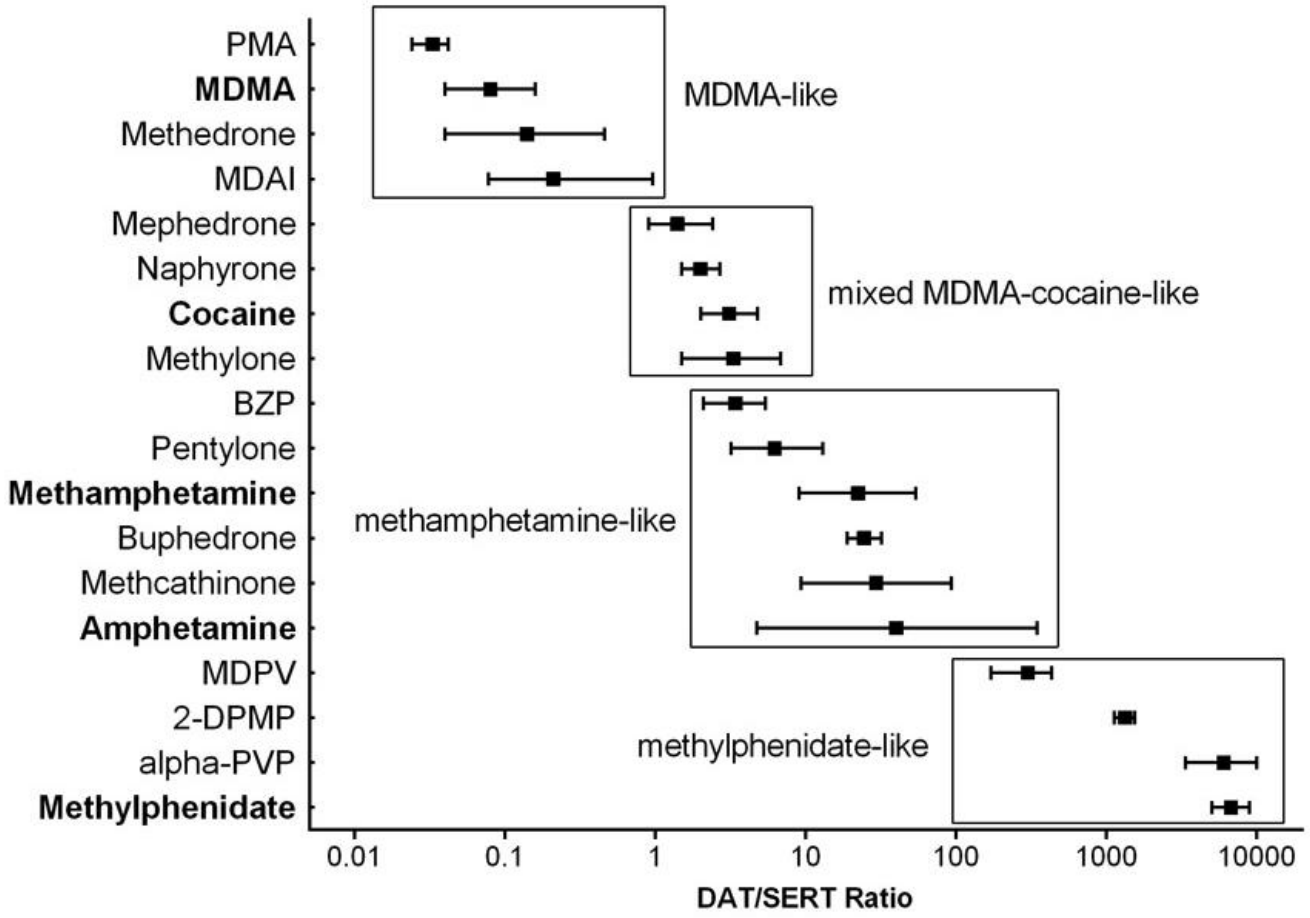
Philyaw TJ, Rothenfluh A, Titos I. The Use of Drosophila to Understand Psychostimulant Responses. Biomedicines. 2022 Jan 6;10(1):119; London ED, Groman SM, Leyton M, de Wit H. The mesocorticolimbic system in stimulant use disorder. Mol Psychiatry. 2025 Nov;30(11):5486-5499

PSICOSTIMOLANTI E NEUROTRASMETTITORI

EFFECTS OF STIMULATION OF DIFFERENT MONOAMINERGIC SYSTEMS

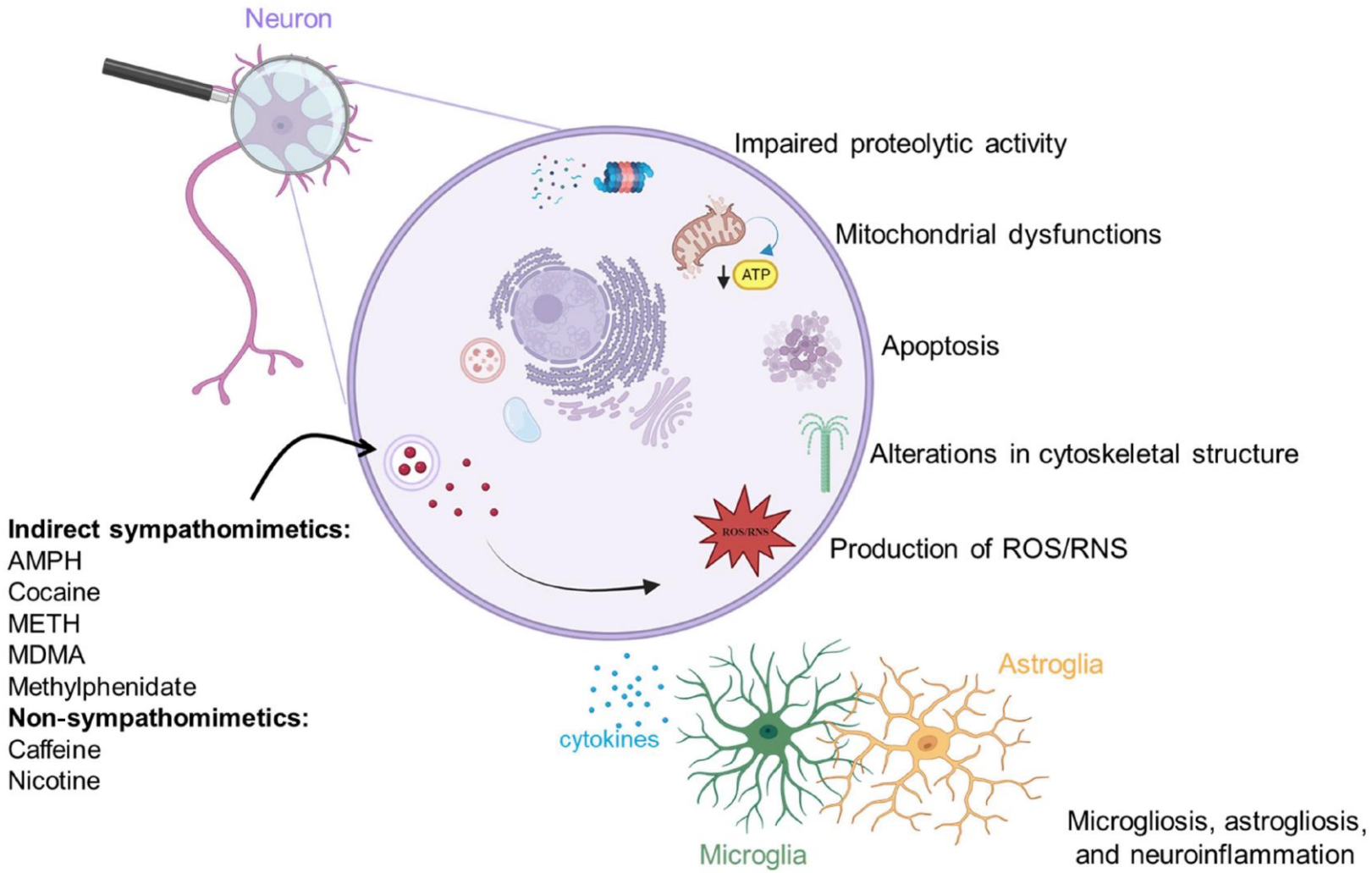
Stimulated monoamine system	Clinical and toxic effects
Dopaminergic	Psychostimulant effects, high abuse and addiction potential, euphoria, locomotor activation, psychosis
Noradrenergic	Sympathomimetic effects, cardiostimulation and psychostimulation
Serotonergic	Entactogenic effects, hyperthermia, hyponatremia, hallucinations, seizures, reduced potential for addiction





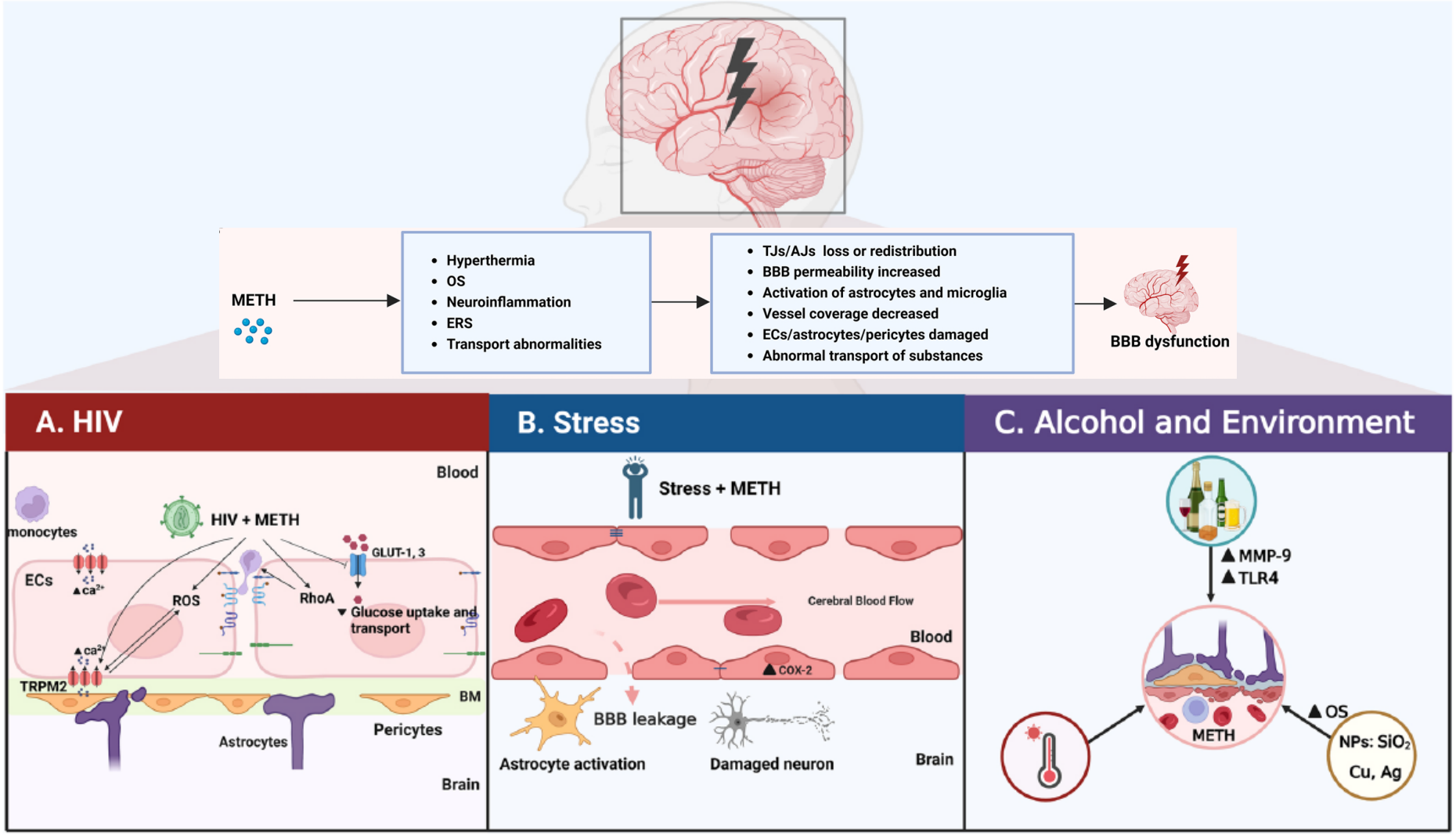
Kuropka P, Zawadzki M, Szpot P. A narrative review of the neuropharmacology of synthetic cathinones-Popular alternatives to classical drugs of abuse. Hum Psychopharmacol. 2023 May;38(3):e2866; Maurer, H., Brandt, S. (eds) New Psychoactive Substances. Handbook of Experimental Pharmacology, vol 252. Springer, Cham. https://doi-org.bvsp.idm.oclc.org/10.1007/164_2018_134; Liechti M. Novel psychoactive substances (designer drugs): overview and pharmacology of modulators of monoamine signaling. Swiss Med Wkly. 2015 Jan 14;145:w14043

NEUROTOSSICITA'



Serra M, Simola N, Pollack AE, Costa G. Brain dysfunctions and neurotoxicity induced by psychostimulants in experimental models and humans: an overview of recent findings. Neural Regen Res. 2024 Sep 1;19(9):1908-1918

ATS E ALTERAZIONI DELLA BEE



Pang L, Wang Y. Overview of blood-brain barrier dysfunction in methamphetamine abuse. Biomed Pharmacother. 2023 May;161:114478

NEUROTOSSICITA'

Stimulant actions

ACUTE MONAMINE RELEASE
- Increased synaptic dopamine and serotonin
- Sympathomimetic effects: tachycardia, hypertension, hyperthermia

ONGOING NEUROTRANSMITTER EFFECTS
- Dopamine and serotonin binding, transport and receptor changes
- Neurotoxicity and cell loss (fronto-striatum, basal ganglia)
- Reduction / kindling of seizure threshold

INDIRECT EFFECTS
- Inflammatory vasculitis, atherosclerosis, cerebral vasculitis
- Cardiomyopathy and arrhythmias
- Thromboembolism
- Hypo-natraemia
- Hyper-coagulation

Moderators

DRUG USE FACTORS
- Dose and frequency
- Route
- Duration of abstinence
- Comorbid use of cannabis and other drugs

PERSONAL FACTORS
- Age, gender
- Family history and genetic vulnerability
- Personal and social supports
- Health literacy
- Service access

Cerebral effects

Stroke

Neurocognitive impairment

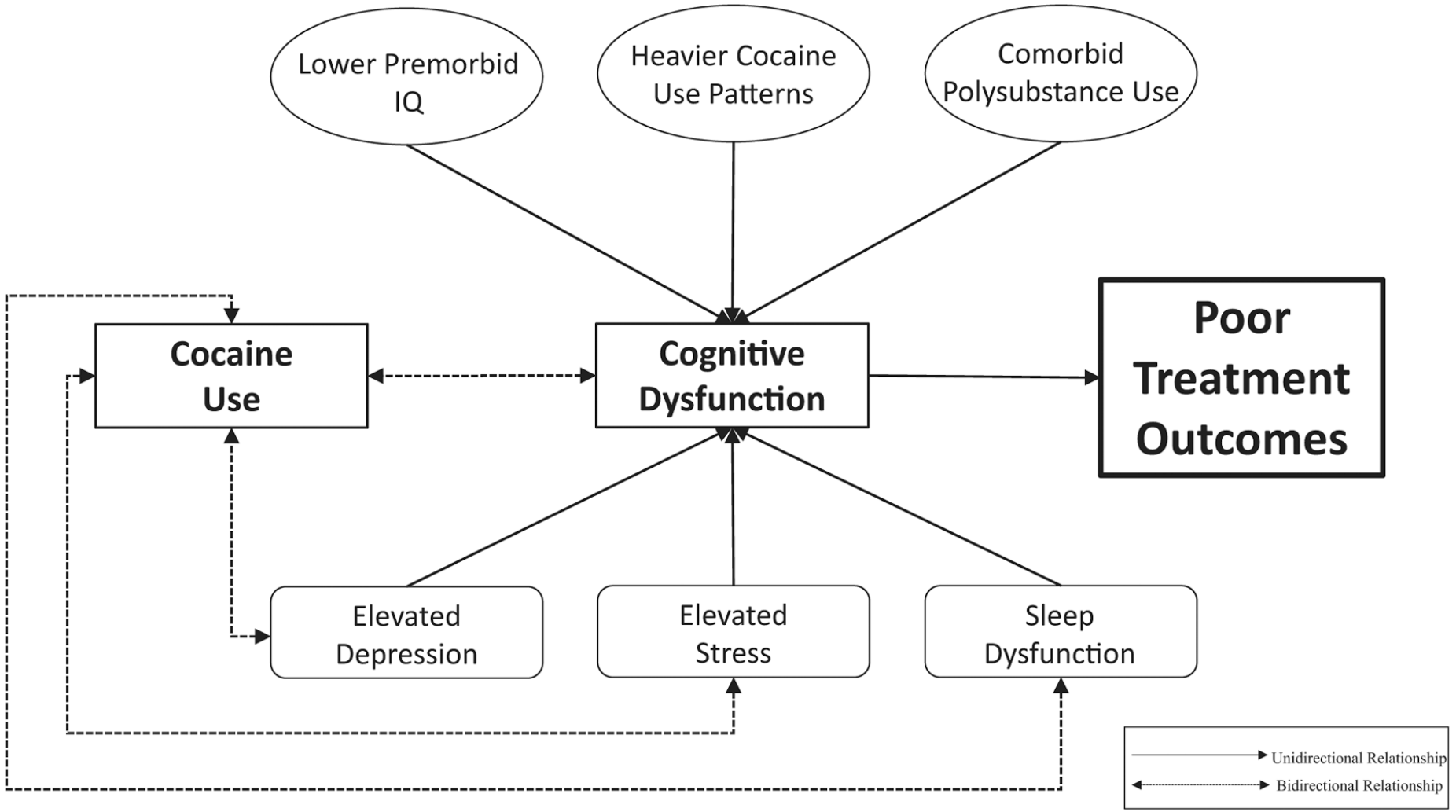
Parkinson's disease

Seizures

Psychotic symptoms & illness

Lappin JM, Sara GE. Psychostimulant use and the brain. Addiction. 2019 Nov;114(11):2065-2077

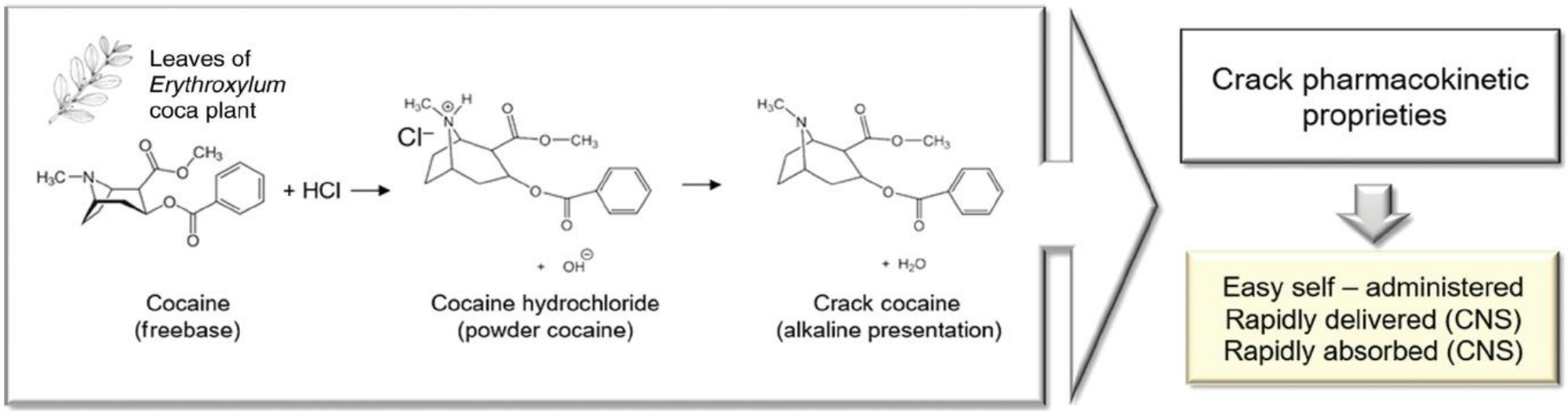
NEUROTOSSICITA'



Mahoney JJ. Cognitive dysfunction in individuals with cocaine use disorder: Potential moderating factors and pharmacological treatments. Exp Clin Psychopharmacol. 2019 Jun;27(3):203-214

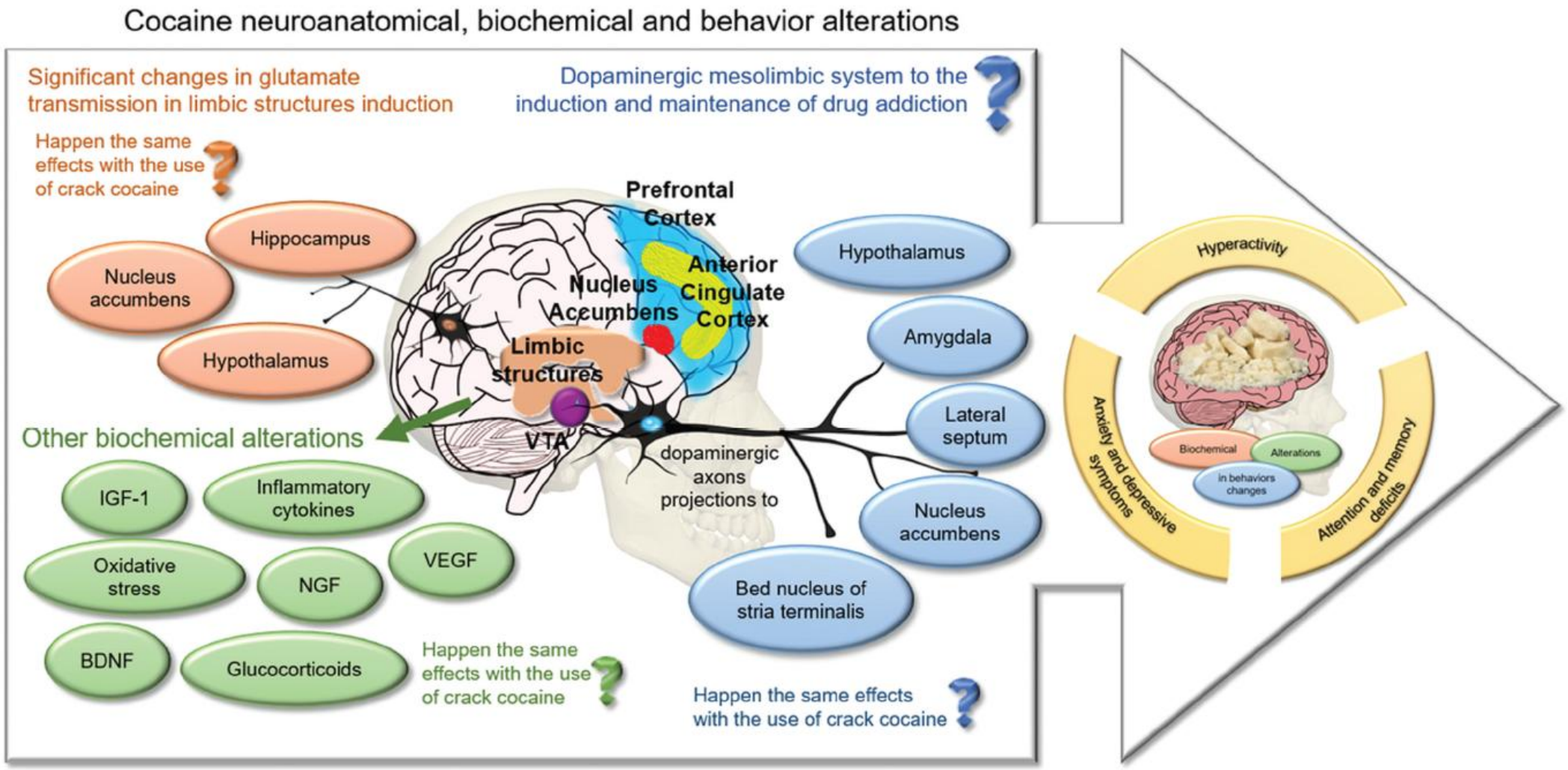
QUALE COCAINA

Cocaine Form	Cocaine Hydrochloride	Cocaine Free Base
Other names it is known by	'coke', 'snow', 'blow'	'crack'
CAS	53-21-4	50-36-2
Molecular formula	$C_{17}H_{22}ClNO_4$	$C_{17}H_{21}NO_4$
Molecular weight	339.8 g mol^{-1}	303.35 g mol^{-1}
Boiling point	-	187 °C
Melting point	195 °C	98 °C
Solubility in water	2 g/mL	1.7×10^{-3} g/mL
pKa; pKb (at 15 °C)	-	8.61; 5.59
Log P	-	2.3



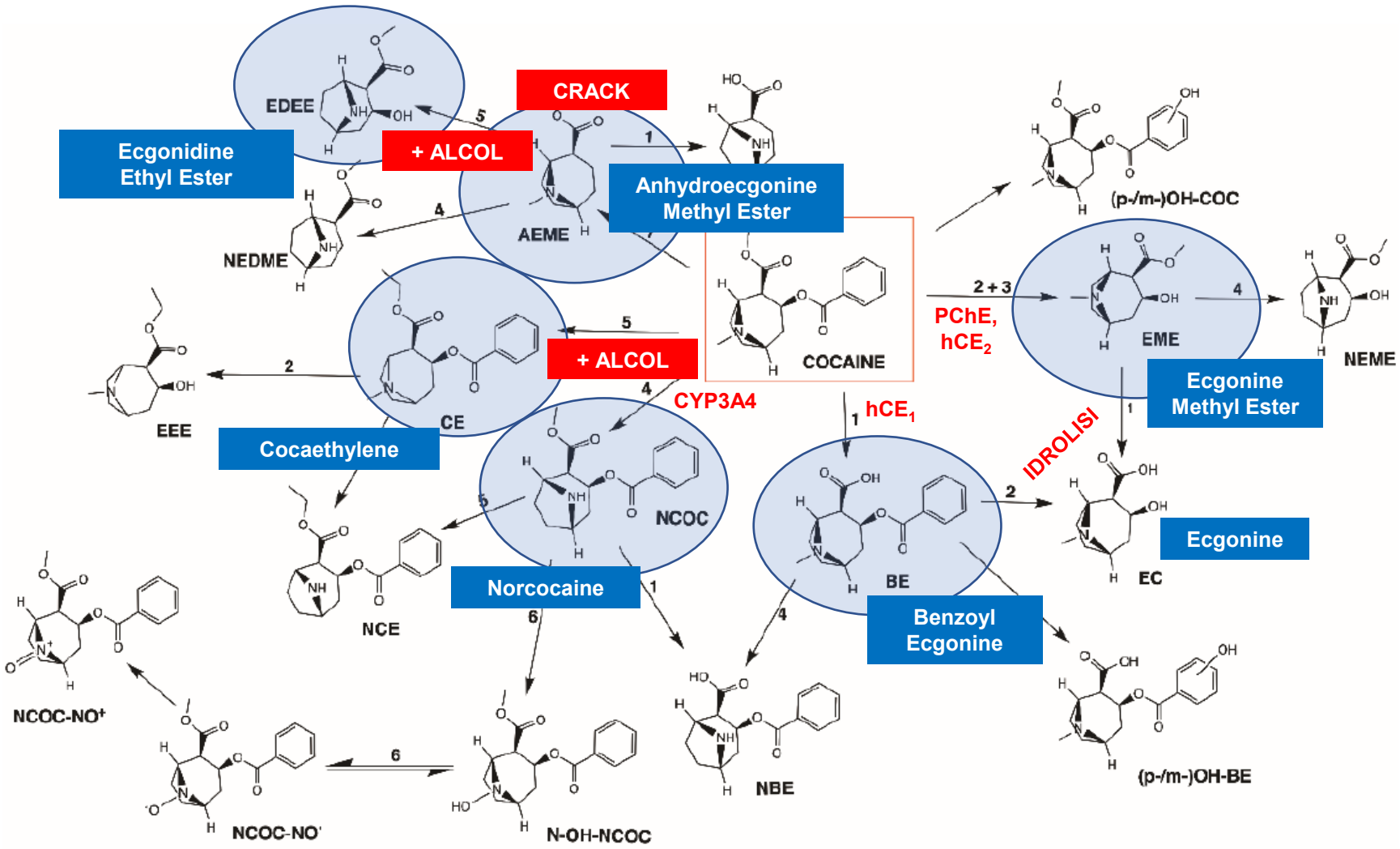
Rosário BDA, de Nazaré MFS, Estadella D, et al. Behavioral and neurobiological alterations induced by chronic use of crack cocaine. Rev Neurosci. 2019 Dec 18;31(1):59-75. Roque Bravo R, Faria AC, Brito-da-Costa AM, et al, On Behalf Of The Oemonom Researchers. Cocaine: An Updated Overview on Chemistry, Detection, Biokinetics, and Pharmacotoxicological Aspects including Abuse Pattern. Toxins (Basel). 2022 Apr 13;14(4):278

COCAINA vs CRACK



Rosário BDA, de Nazaré MFS, Estadella D, Ribeiro DA, Viana MB. Behavioral and neurobiological alterations induced by chronic use of crack cocaine. Rev Neurosci. 2019 Dec 18;31(1):59-75

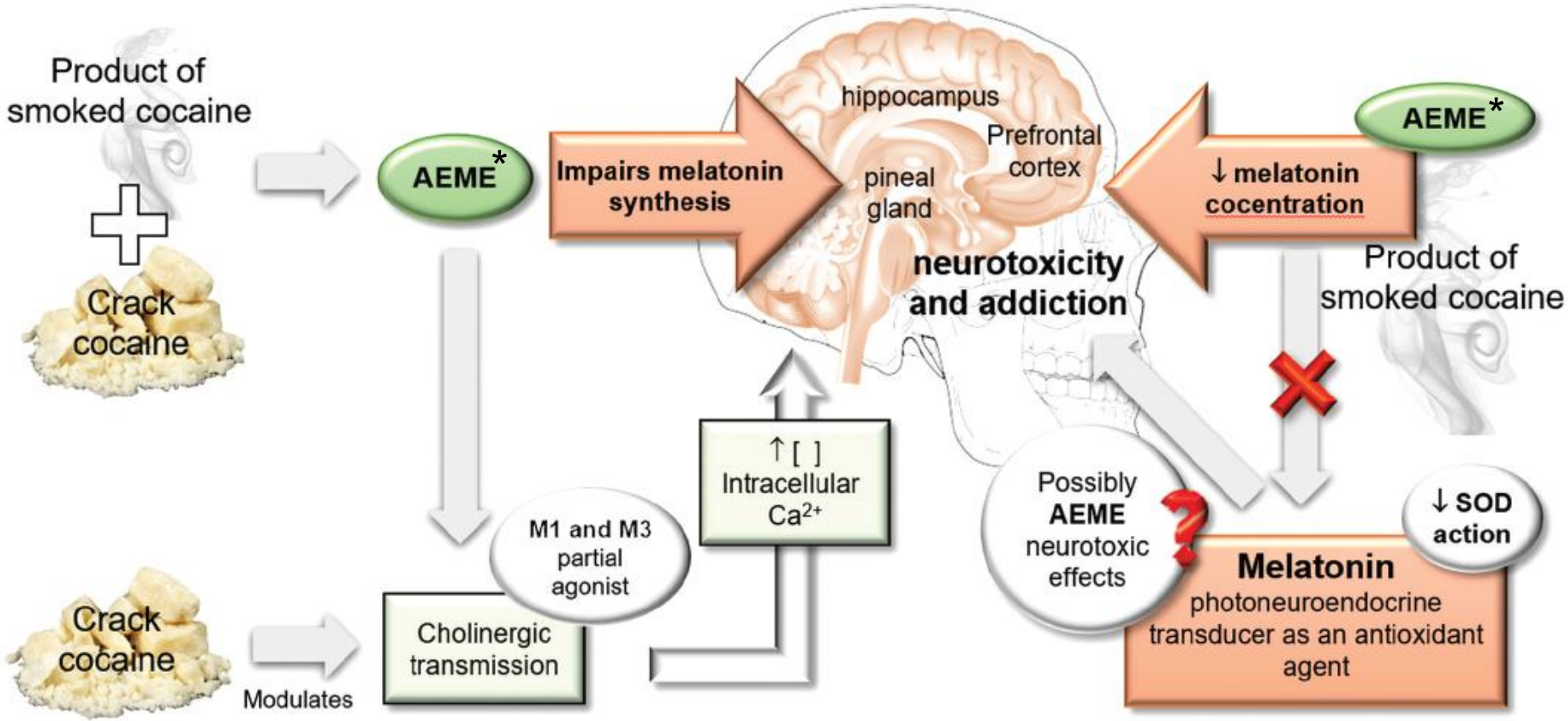
COCAINA E METABOLITI



Roque Bravo R, Faria AC, Brito-da-Costa AM, Carmo H, Mladěnka P, Dias da Silva D, Remião F, On Behalf Of The Oemonom Researchers. Cocaine: An Updated Overview on Chemistry, Detection, Biokinetics, and Pharmacotoxicological Aspects including Abuse Pattern. Toxins (Basel). 2022 Apr 13;14(4):278

COCAINA vs CRACK

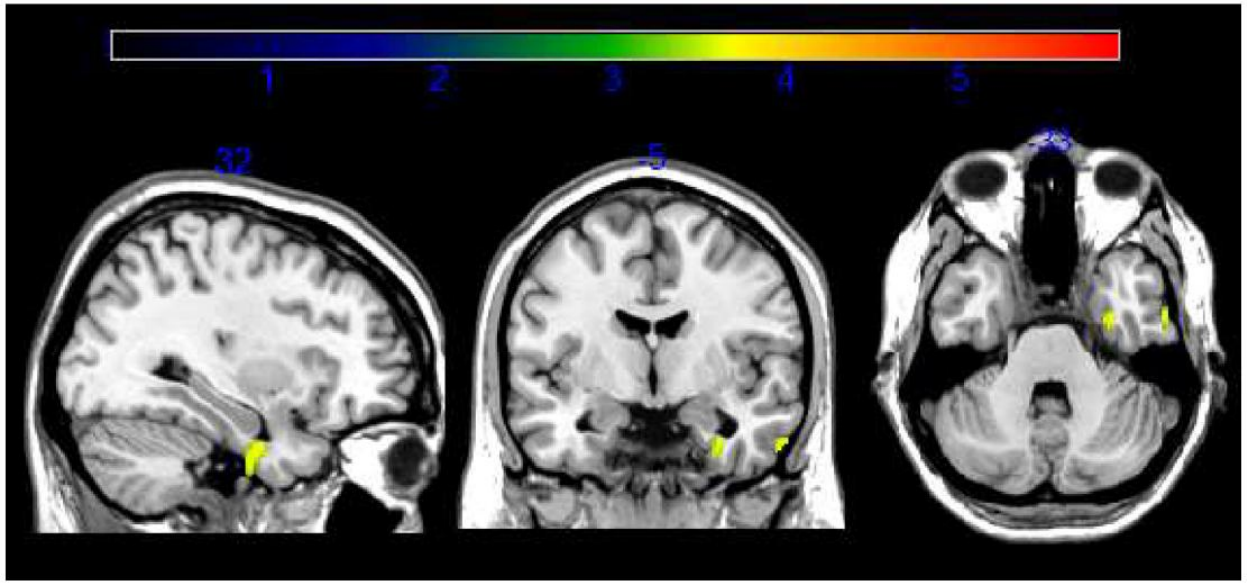
*Anhydroecgonine Methyl Ester



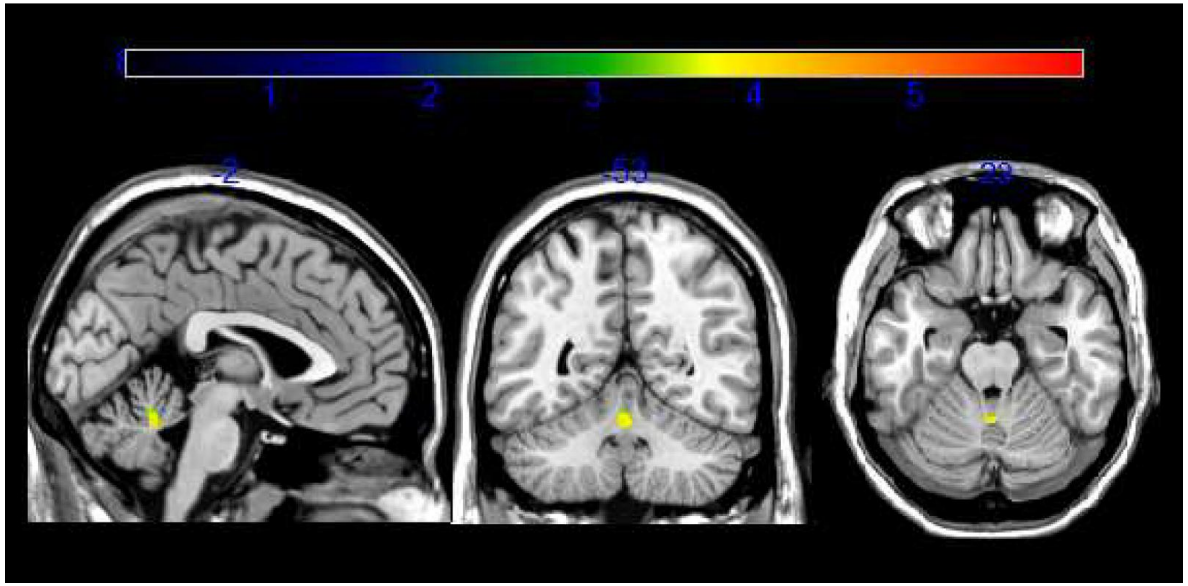
Rosário BDA, de Nazaré MFS, Estadella D, Ribeiro DA, Viana MB. Behavioral and neurobiological alterations induced by chronic use of crack cocaine. Rev Neurosci. 2019 Dec 18;31(1):59-75

COCAINA vs CRACK

Patients with CUD display widespread cortical and subcortical brain shrinkage. Patients with preferential crack-cocaine use and subsequent relapsers showed **specific gray matter volume deficits**, suggesting that different patterns of cocaine use and different clinical outcome are associated with different brain macrostructure.



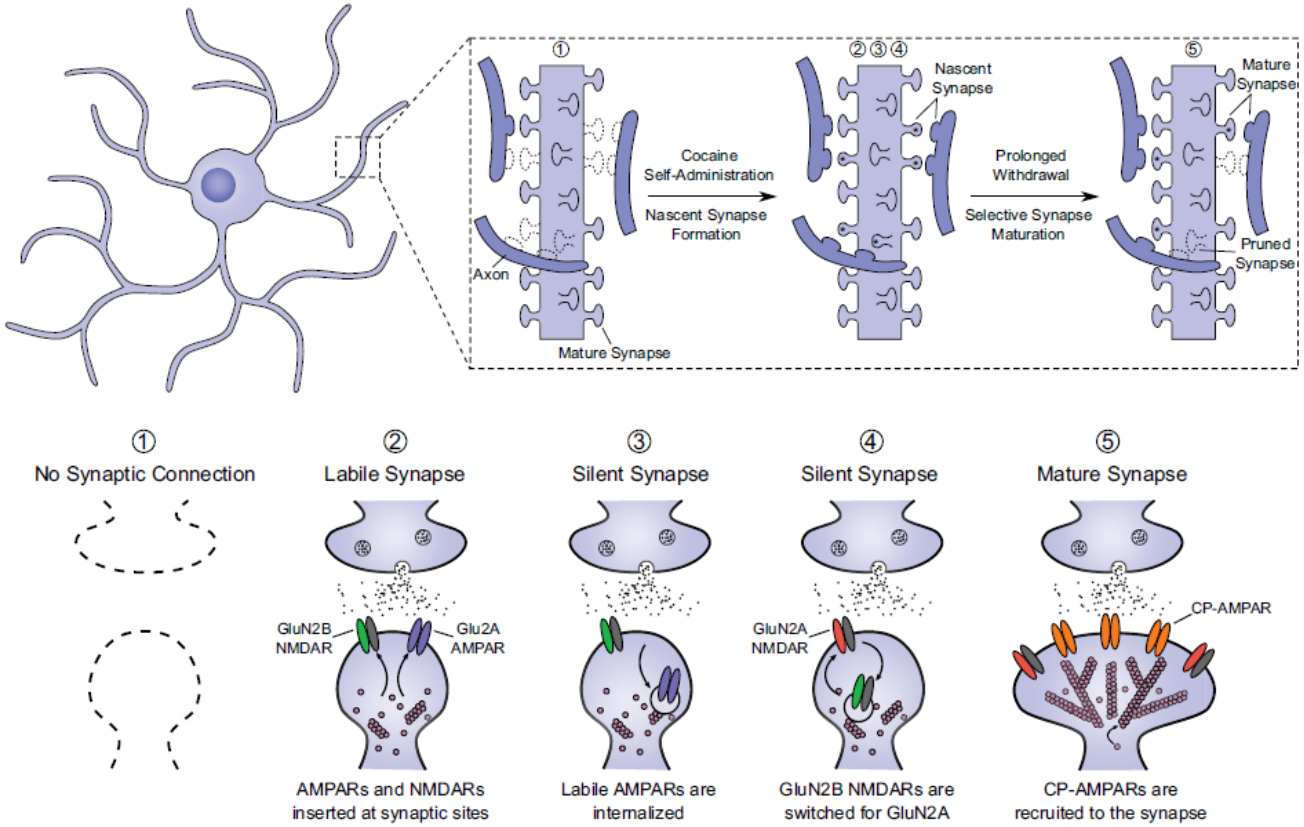
GRAY MATTER BRAIN ABNORMALITIES IN CUD-CRACK COMPARED TO CUD-HYDRO

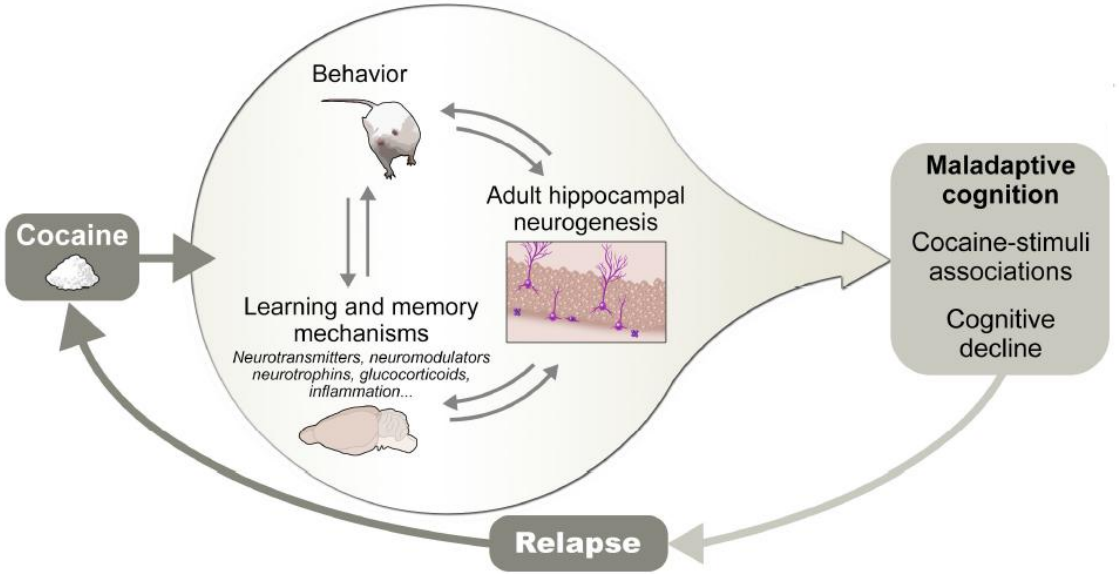


GRAY MATTER BRAIN ABNORMALITIES IN RELAPSERS COMPARED TO ABSTAINERS

Poireau M, Segobin S, Maillard A, Clergue-Duval V, Icick R, Azuar J, Volle E, Delmaire C, Bloch V, Pitel AL, Vorspan F. Brain alterations in Cocaine Use Disorder: Does the route of use matter and does it relate to the treatment outcome? Psychiatry Res Neuroimaging. 2024 Aug;342:111830

COCAINA E NEUROGENESI





E. Castilla-Ortega, D.L. de Guevara-Miranda, A. Serrano, F.J. Pavón, J. Suárez, F.R. de Fonseca, L.J. Santín, The impact of cocaine on adult hippocampal neurogenesis: potential neurobiological mechanisms and contributions to maladaptive cognition in cocaine addiction disorder, Biochemical Pharmacology (2017); Wright WJ, Dong Y. Silent Synapses in Cocaine-Associated Memory and Beyond. J Neurosci. 2021 Nov 10;41(45):9275-9285

PSICOSTIMOLANTI E DSM

TABLE 4. Adjusted Odds Ratio of Clinical Characteristics by Mutually Exclusive Stimulant Type (NSDUH 2021–2022)

	AOR‖ (95% CI)								
	Past-year DSM-5 Impaired Control*	Past-year DSM-5 Social Impairment†	Past-year DSM-5 Risky Use‡	Past-year DSM-5 Pharmacologic Indicators§	Past-year DSM-5 Craving	Past-year Psychological Distress	Past-year Suicidal Ideation	Past-year Suicide Attempt	Past-year Major Depressive Episode
Stimulant type used									
Nonmedical prescription stimulants only	REF	REF	REF	REF	REF	REF	REF	REF	REF
Non-crack cocaine only	0.96 (0.67, 1.38)	1.12 (0.62, 2.01)	1.01 (0.57, 1.79)	0.68 (0.45, 1.03)	1.17 (0.76, 1.81)	0.63¶ (0.44, 0.92)	0.96 (0.66, 1.39)	0.52 (0.24, 1.13)	0.61¶ (0.40, 0.91)
Crack cocaine	4.13¶ (2.48, 6.88)	9.32¶ (4.43, 19.63)	3.93¶ (2.00, 7.75)	2.40¶ (1.33, 4.33)	4.39¶ (2.56, 7.51)	0.91 (0.50, 1.65)	1.70 (0.83, 3.47)	2.98 (0.85, 10.48)	0.76 (0.37, 1.55)
Methamphetamine only	4.65¶ (2.96, 7.29)	7.27¶ (3.90, 13.56)	4.05¶ (2.31, 7.11)	3.09¶ (1.97, 4.84)	4.79¶ (3.07, 7.49)	0.85 (0.55, 1.32)	1.40 (0.86, 2.26)	2.06 (0.75, 5.66)	0.84 (0.51, 1.38)
Polystimulants	6.18¶ (4.25, 9.00)	9.54¶ (5.57, 16.32)	6.72¶ (4.28, 10.55)	5.33¶ (3.64, 7.80)	6.49¶ (4.48, 9.40)	1.20 (0.84, 1.72)	1.20 (0.79, 1.83)	1.81 (0.77, 4.25)	1.16 (0.77, 1.75)

Truchan J, Schepis TS, Pasman E, McCabe VV, McCabe SE. DSM-5 Stimulant Use Disorder Severity, Stimulant Craving, and Other Clinical Characteristics Based on Stimulant Type (Cocaine, Methamphetamine, Nonmedical Prescription Stimulants, or Polystimulants). J Addict Med. 2025 Sep 3

CATINONI E REWARD

Synthetic Cathinones	The Reinforcing Potency	The Reinforcing Efficacy
Mephedrone	≥METH [81,82]	=METH [82]
Methylone	<mephedrone [82,83], >mephedrone [90] >MDMA [85] <cocaine [88]	<cocaine [88]
MDPV	>METH [86,89] ≥methylone [88] >cocaine [89]	≥METH [87,89] >cocaine [88,89]
α-PVP	=MDPV [91], =4-MePPP [77] >METH >4cl-α-PVP >4cl-α-PPP [78]	=MDPV [91], <Methylone [94] >METH [77] =MDMA [94] <cocaine [94]
Pentylone, pentedrone	>methylone [96]	>methylone [96]
Ethylone, dibutylone, N-ethylpentylone	<METH [97]	<METH [97]

Chen S, Zhou W, Lai M. Synthetic Cathinones: Epidemiology, Toxicity, Potential for Abuse, and Current Public Health Perspective. Brain Sci. 2024 Mar 29;14(4):334

POLIABUSO E OUTCOME

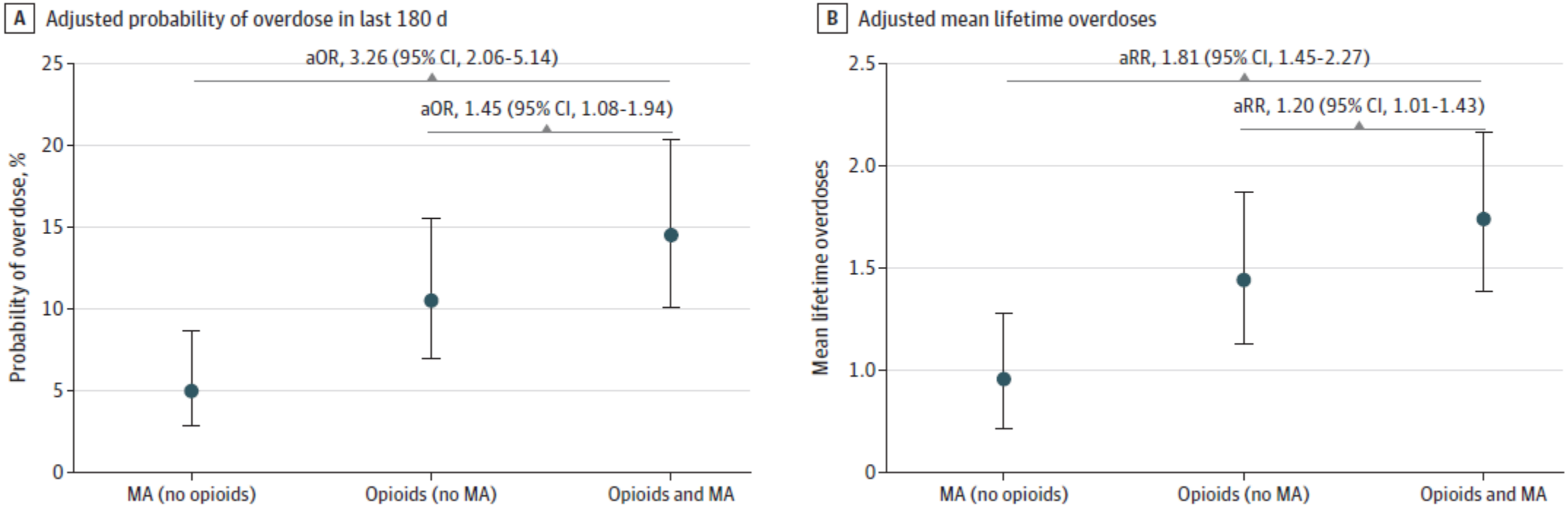
MOUD treatment outcomes by recent (past 30 day) methamphetamine use.

	Overall	No methamphetamine use	Methamphetamine use	P value
N	2899	720 (24.8%)	2179 (75.2%)	
MOUD, ever				
Buprenorphine (sublingual or injectable)	1163 (40.1%)	353 (49.0%)	810 (37.2%)	<0.001
Methadone	694 (23.9%)	222 (30.8%)	472 (21.7%)	<0.001
MOUD, past 30 days				
Buprenorphine (sublingual or injectable)	360 (12.4%)	137 (19.0%)	223 (10.2%)	<0.001
Methadone	226 (7.8%)	88 (12.2%)	138 (6.3%)	<0.001
Days treated with MOUD, past 6 months[1]				
Buprenorphine (sublingual only)	36.4 (60.1)	42.2 (64.8)	33.8 (57.8)	0.03
Methadone	42.7 (67.8)	52.3 (74.1)	38.0 (64.1)	0.01
Inability to access MOUD, past 6 months				
Buprenorphine (sublingual)	534 (18.4%)	124 (17.2%)	410 (18.8%)	0.27
Buprenorphine (injectable)	163 (5.6%)	20 (2.8%)	143 (6.6%)	<0.001
Methadone	327 (11.3%)	65 (9.0%)	262 (12.0%)	0.02

Tsui JI, Whitney BM, Korthuis PT, Chan B, Pho MT, Jenkins WD, Young AM, Cooper HLF, Friedmann PD, Stopka TJ, de Gijsel D, Miller WC, Go VF, Westergaard R, Brown R, Seal DW, Zule WA, Feinberg J, Smith GS, Mixson LS, Fredericksen R, Crane HM, Delaney JA; Rural Opioid Initiative Consortium. Methamphetamine use and utilization of medications for opioid use disorder among rural people who use drugs. Drug Alcohol Depend. 2023 Sep 1;250:110911

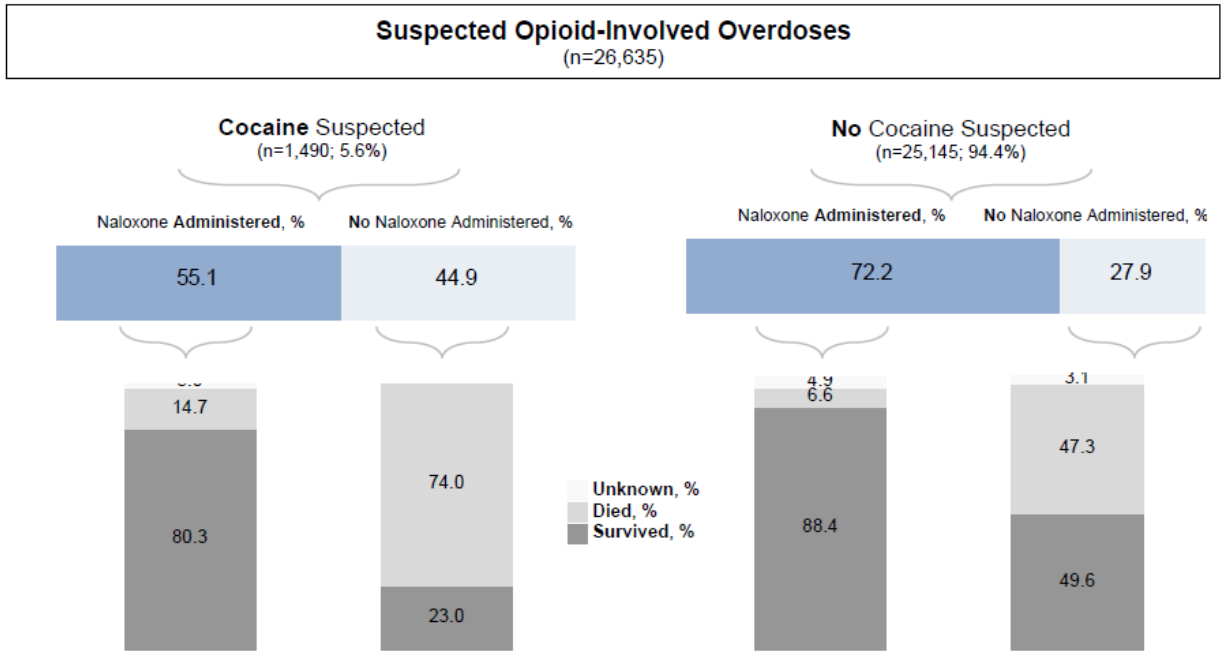
OVERDOSE

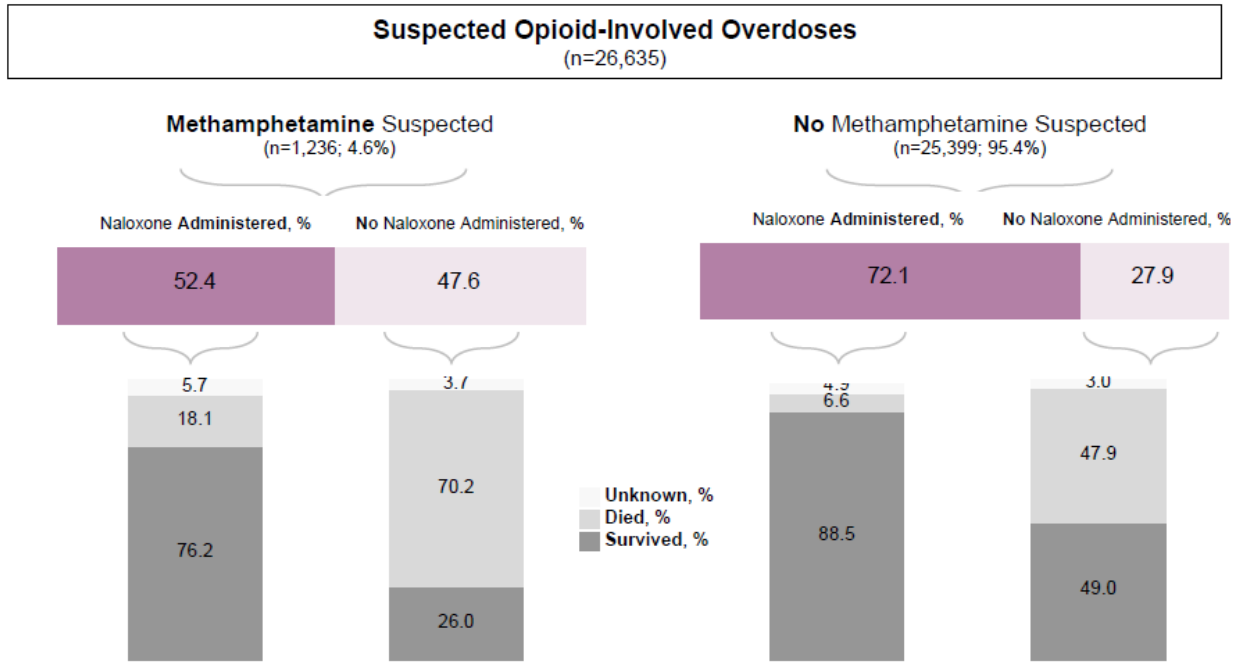
Figure. Adjusted Probability of Methamphetamine (MA) Overdose in Last 180 Days and Adjusted Mean Lifetime Overdoses



Korthuis PT, Cook RR, Foot CA, Leichtling G, Tsui JI, Stopka TJ, Leahy J, Jenkins WD, Baker R, Chan B, Crane HM, Cooper HL, Feinberg J, Zule WA, Go VF, Estadt AT, Nance RM, Smith GS, Westergaard RP, Van Ham B, Brown R, Young AM. Association of Methamphetamine and Opioid Use With Nonfatal Overdose in Rural Communities. JAMA Netw Open. 2022 Aug 1;5(8):e2226544

OVERDOSE





Cano M, Jones A, Silverstein SM, Daniulaityte R, LoVecchio F. Naloxone administration and survival in overdoses involving opioids and stimulants: An analysis of law enforcement data from 63 Pennsylvania counties. Int J Drug Policy. 2025 Jan;135:104678

C'ERA UNA VOLTA

General treatment directives

Maintain total abstinence from cocaine, alcohol, opiods, marijuana, and addictive pills.
Avoid people, places and things associated with cocaine use.
Overcome denial and admit to the consequences of the addiction.
Attend treatment sessions on a regular basis.
- Maintain openness and honesty in treatment.
- Discuss emotionally important issues.
- Learn drug-free coping skills.

Utilize craving reduction techniques.

Dackis CA, O'Brien CP. Cocaine dependence: a disease of the brain's reward centers. J Subst Abuse Treat. 2001 Oct;21(3):111-7

LE EVIDENZE

	Abstinence	Use	Lapse	Relapse	Retention	Harms
All Antidepressants: Bupropion, Desipramine, Fluoxetine, Mirtazapine, Nefazodone, Paroxetine, Sertraline, Venlafaxine	★★	★★	★	★	★★★	★★
Aminoketone: Bupropion	★	★	NA	NA	★★	Ø
SSRIs: Fluoxetine, Paroxetine, and Sertraline	NA	NA	Ø	Ø	★★	★
SSRI in patients abstinent at Baseline: Sertraline	NA	NA	★	★	★	Ø
All Antipsychotics: Aripiprazole, Haloperidol, Lamotrigine, Olanzapine, Quetiapine, Risperidone, Reserpine	★	★	Ø	Ø	★★	Ø
Psychostimulants: Dexamphetamine, Lisdexamfetamine, Mazindol, Methamphetamine, Methylphenidate, Mixed Amphetamine Salts, Modafinil, Selegiline	★	★	NA	NA	★★	★★
Cognitive Enhancing Drugs: Memantine, Atomoxetine	Ø	Ø	NA	Ø	Ø	Ø
Anxiolytic: Buspirone	Ø	NA	Ø	Ø	Ø	Ø
Anticonvulsants/Muscle Relaxants: Baclofen, Carbamazepine, Gabapentin, Lamotrigine, Phenytoin, Tiagabine, Topiramate, Vigabatrin	**NA**	★★	NA	NA	★★	**Ø**
Anticonvulsant: Topiramate	★	**Ø**	NA	NA	★★	**Ø**
Drugs for other substance use disorders: Acamprosate, Buprenorphine, Buprenorphine + Naloxone, Disulfiram, Naltrexone, Methadone, Varenicline	★	Ø	Ø	Ø	Ø	Ø
Disulfiram	★	★	NA	NA	★★	★
Dopamine agonists: Amantadine, bromocriptine, L dopa/Carbidopa, pergolide, cabergoline hydergine, and pramipexole	★	**NA**	NA	NA	★★	**NA**

Shading represents the direction of effect:

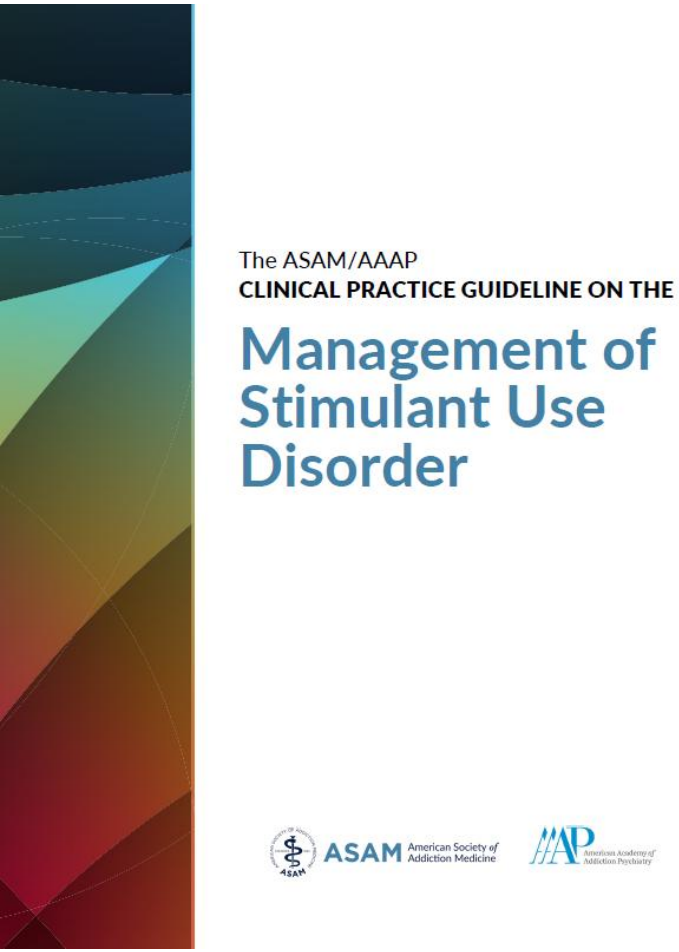
(No color)	Unclear
Grey	No difference
Green	Evidence of benefit
Red	Favors placebo

Symbols represent the strength of the evidence:

NA	No evidence or not applicable
Ø	Insufficient
★	Low
★★	Moderate
★★★	High

Chan B, Kondo K, Freeman M, Ayers C, Montgomery J, Kansagara D. Pharmacotherapy for Cocaine Use Disorder-a Systematic Review and Meta-analysis. J Gen Intern Med. 2019 Dec;34(12):2858-2873

LE LINEE GUIDA



NO PHARMACOTHERAPIES approved for the treatment of Stimolant Use Disorder (StUD).

Pharmacotherapies may be prescribed **OFF-LABEL**.

The existing evidence is relatively **LOW QUALITY**.

Importance of **CAREFUL AND ONGOING RISK–BENEFIT ASSESSMENTS** and close monitoring when prescribing medications for StUD. Clinicians should **MONITOR MEDICATION ADHERENCE AND NONMEDICAL USE** through strategies such as frequent clinical contact, drug testing, pill counts, and prescription drug monitoring program (PDMP) checks.

Clinical Guideline Committee (CGC) Members; ASAM Team; AAAP Team; IRETA Team. The ASAM/AAAP Clinical Practice Guideline on the Management of Stimulant Use Disorder. J Addict Med. 2024 May-Jun 01;18(1S Suppl 1):1-56

LE LINEE GUIDA

NON-PSYCHOSTIMULANT MEDICATIONS

(+ mirtazapine 30-60 mg/die for ATS use disorder)

- BUPROPION 150-300 mg/die
  (+ naltrexone for ATS use disorder)
- TOPIRAMATE 150-200 mg/die

PSYCHOSTIMULANT MEDICATIONS

(+ methylphenidate 20-72 mg/die for ATS use disorder)

- MODAFINIL 200-400 mg/die
- TOPIRAMATE AND EXTENDED-RELEASE MIXED AMPHETAMINE SALTS (MAS-ER) 100+60 mg/die
- AMPHETAMINE FORMULATIONS 60 mg/die

Clinical Guideline Committee (CGC) Members; ASAM Team; AAAP Team; IRETA Team. The ASAM/AAAP Clinical Practice Guideline on the Management of Stimulant Use Disorder. J Addict Med. 2024 May-Jun 01;18(1S Suppl 1):1-56

CO-OCCURRING DISORDERS: PSYCHOSIS OR MANIA

Clinicians should **TREAT StUD AND ANY CO-OCCURRING PSYCHIATRIC DISORDERS CONCURRENTLY**.

Clinicians should generally avoid use of psychostimulant medications to treat StUD in patients with histories of psychosis, whether substance-induced or preexisting. Similarly, clinicians should generally avoid use of psychostimulant medications to treat StUD in patients with histories of stimulant-induced mood disorders.

If stimulant-induced psychosis or mania is suspected, clinicians should consider a **GRADUAL TAPER OFF ANTIPSYCHOTIC MEDICATION AFTER A PERIOD OF REMISSION OF PSYCHOTIC SYMPTOMS** (**Moderate certainty, Strong Recommendation**).

Clinical Guideline Committee (CGC) Members; ASAM Team; AAAP Team; IRETA Team. The ASAM/AAAP Clinical Practice Guideline on the Management of Stimulant Use Disorder. J Addict Med. 2024 May-Jun 01;18(1S Suppl 1):1-56

CO-OCCURRING DISORDERS: ADHD

Clinicians should address ADHD symptoms as part of the treatment of StUD.

Clinicians should consider prescribing **PSYCHOSTIMULANT MEDICATIONS** to manage ADHD when the benefits of the medication outweigh the risks.

For adolescent and young adult patients, clinicians should additionally consider arranging for a parent, health professional or other trusted adult to **DIRECTLY OBSERVE ADMINISTRATION OF THE MEDICATION** (**Clinical consensus, Strong Recommendation**).

Use of **EXTENDED-RELEASE OR PRODRUG FORMULATIONS** can mitigate risks related to misuse and the addictive potential of prescription stimulants by producing less rapid onset of effect, maintaining more steady serum levels of medication, and/or preventing or reducing effects when alternative routes of administration are used.

Clinical Guideline Committee (CGC) Members; ASAM Team; AAAP Team; IRETA Team. The ASAM/AAAP Clinical Practice Guideline on the Management of Stimulant Use Disorder. J Addict Med. 2024 May-Jun 01;18(1S Suppl 1):1-56

POPULATION-SPECIFIC CONSIDERATIONS: ADOLESCENTS AND YOUNG ADULTS

Adolescents with ADHD are at increased risk for SUD. **PHARMACOLOGICAL TREATMENT** of ADHD in this population, including with psychostimulant medications, **REDUCES THE RISK FOR DEVELOPMENT OF SUD**.

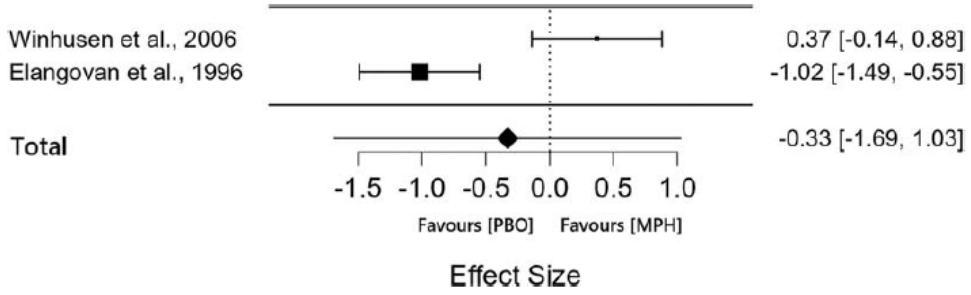
Data are limited on the **POTENTIAL BENEFITS AND HARMS OF DRUG TESTING** for adolescents and young adults with StUD. Testing could be utilized when the outcome would impact clinical decision-making or be important for medication monitoring or psychiatric follow-up. Clinicians should consider the technical limitations of the selected matrix and drug panel.

While adolescent and young adult patients with StUD can present with a range of co-occurring mental health conditions (eg, depression, anxiety), clinicians should pay particular attention to signs or symptoms of **ADHD AND EATING DISORDERS**, as these are particularly common comorbidities in these populations.

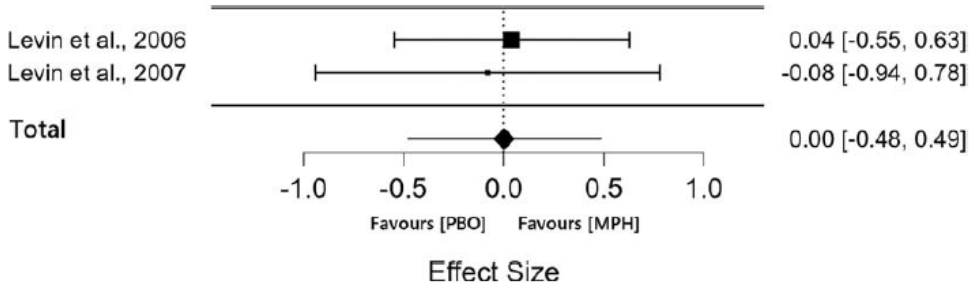
Clinical Guideline Committee (CGC) Members; ASAM Team; AAAP Team; IRETA Team. The ASAM/AAAP Clinical Practice Guideline on the Management of Stimulant Use Disorder. J Addict Med. 2024 May-Jun 01;18(1S Suppl 1):1-56

METILFENIDATO

Forest plot for the meta-analysis of **craving for cocaine**.



Forest plot for the of the % of pts who could remain **abstinent for at least 2 weeks**.



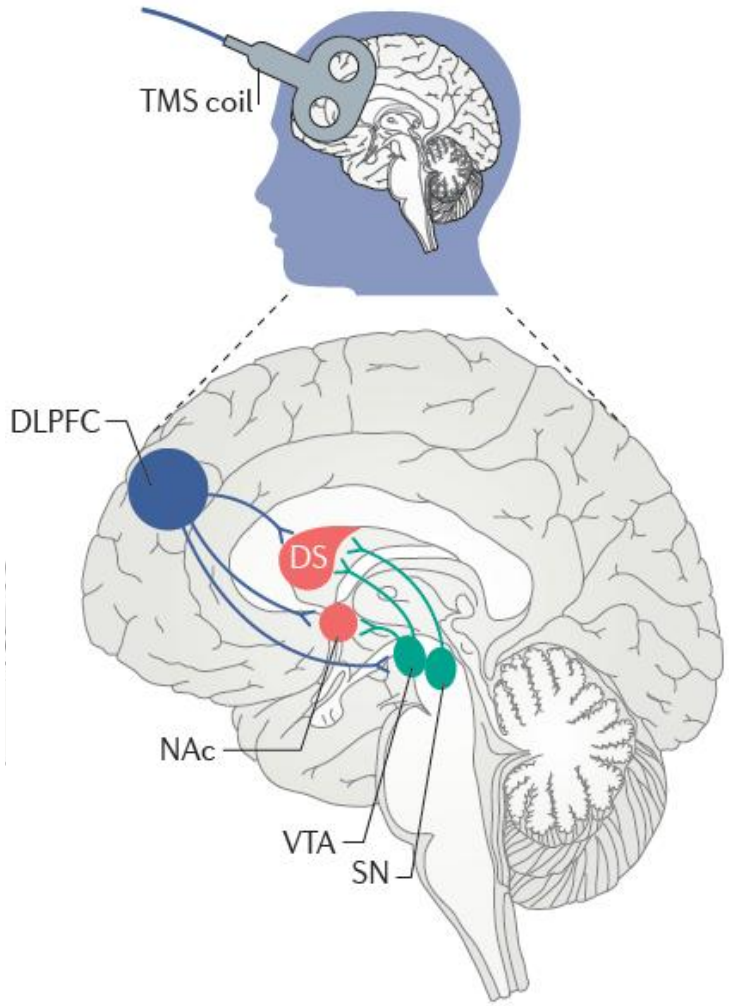
CONCLUSION

The current evidence on the use of MPH for the treatment of CUD remains **INCONCLUSIVE**, due to limited number and high heterogeneity of the studies. Nevertheless, considering the extensive use of MPH, its tolerability in clinical practice, and the lack of approved treatments for CUD, future research should further investigate its efficacy in patients with Stimulant Use Disorder.

There might be a rationale for MPH in **patients with CUD and ADHD**, which should be carefully assessed with rigorous clinical studies in this specific population.

Biso L, Lebosi M, Bonaso M, Carli M, Scarselli M. Methylphenidate for the Treatment of Cocaine Use Disorder: A Systematic Review and Meta-analysis. J Addict Med. 2025 Oct 24

NEUROSTIMOLAZIONE



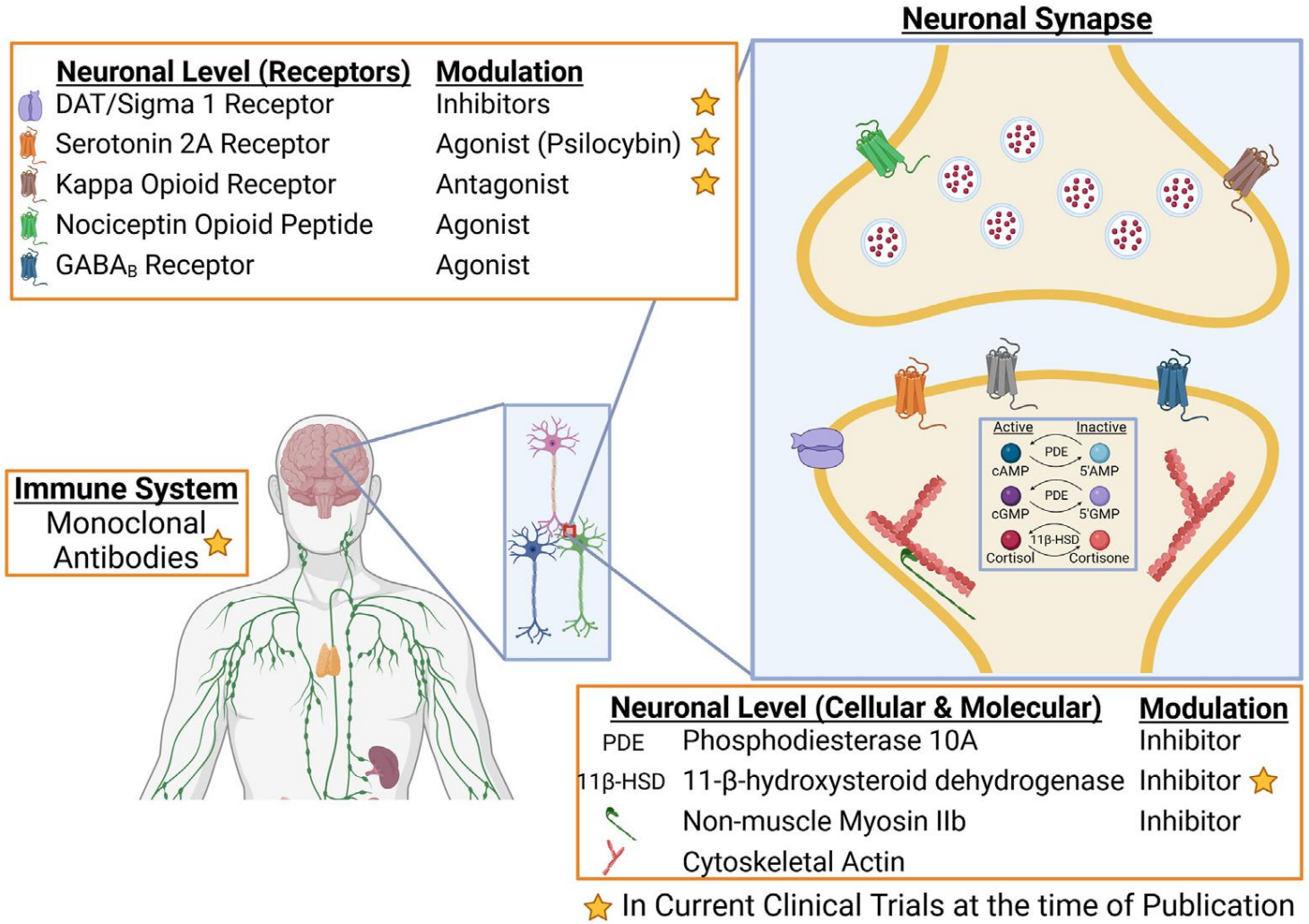
Included Studies/Protocols Stratified According to the Type of Brain Stimulation and Substance They Focused on.

Condition	TMS	tDCS	tACS	DBS	VNS	Multiple	Total	%
Alcohol	23	19	1	6	1	–	50	30.7
Opioid	14	5	–	10	1	1[a]	31	19.0
Nicotine	20	8	–	–	–	–	28	17.2
Cocaine	12	5	–	1	–	–	18	11.0
Cannabis	13	4	–	–	–	–	17	10.4
Any stimulant[b]	12	1	–	1	–	–	14	8.6
Multiple	2[c,d]	2[e,f]	–	–	–	1[g]	5	3.1
Total	96	44	1	18	2	2	163	100.0
%	58.9	27.0	0.6	11.0	1.2	1.2	100.0	-

TMS, transcranial magnetic stimulation; tDCS, transcranial direct-current stimulation; tACS, transcranial alternating current stimulation; DBS, deep brain stimulation; VNS, vagus nerve stimulation.
[a]TMS, tDCS.
[b]Includes 10 studies focused only on amphetamine/methamphetamine.
[c]Alcohol, opioid, cocaine.
[d]Alcohol, cocaine.
[e]Any substance (not limited to specific few).
[f]Alcohol, stimulants.
[g]Nicotine, opioid: DBS, tDCS.

Diana M, Raij T, Melis M, Nummenmaa A, Leggio L, Bonci A. Rehabilitating the addicted brain with transcranial magnetic stimulation. Nat Rev Neurosci. 2017 Nov;18(11):685-693; Biswas T, Singh GK, Mishra P, Mishra BR, Parmar A. Trends of Brain Stimulation Research in Substance Use Disorder: A Review of ClinicalTrials.gov Registered Trials and Their Publications. Indian J Psychol Med. 2024 Dec 9:02537176241300195

LA RICERCA



Young EJ, Radnai L, Prikhodko V, Miller CA. Novel therapeutics in development for the treatment of stimulant-use disorder. Curr Opin Neurobiol. 2024 Aug;87:102898

CONCLUSIONI

- Valutazione del/dei tipo/i di stimolante/i assunto/i
- Valutazione dei quadri di poliabuso
- Valutazione di eventuali comorbidità psichiatriche e organiche
- **Setting di trattamento**
- Conoscenza e applicazione delle linee guida disponibili
- **Interventi psicoterapeutici e socio-educativi**
- Nuovi approcci (realtà virtuale, rTMS)
- Applicazione di interventi di Riduzione del Danno

Speaker's personal opinion

Grazie!!!

UNA DOMANDA SENZA RISPOSTE?
TOSSICOLOGIA CLINICA
DEGLI PSICO STIMOLANTI

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