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Trends in the availability and types of drugs sold on the internet via cryptomarkets, February 2023 - January 2024

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16 cryptomarkets monitored

From 1st February 2023 to 31st January 2024, 16 cryptomarkets were monitored, of which 11 remained active at the end of the reporting period.

1. **Incognito**
2. **Bohemia**
3. **Nemesis**
4. **Archetyp**

The largest cryptomarkets in the final month of monitoring (January 2024).

There was an average of 42,008 drug listings per snapshot in January 2024; 1.9% decrease per month over the 12-month period.

29% Cannabis
8.0% MDMA
7.6% Benzodiazepines
7.3% Cocaine
6.2% Opioids (excluding heroin)
5.8% Meth/amphetamines

Top 6 drugs across cryptomarket listings from February 2023 to January 2024.

Opioids
excluding heroin

The market share of opioids (excluding heroin) showed the highest rate of increase from 5.2% in February 2023 to 6.8% in January 2024.

Cannabis

Cannabis was the only class with a significant decrease in market share in the 12-month period, from 32% in February 2023 to 28% in January 2024.

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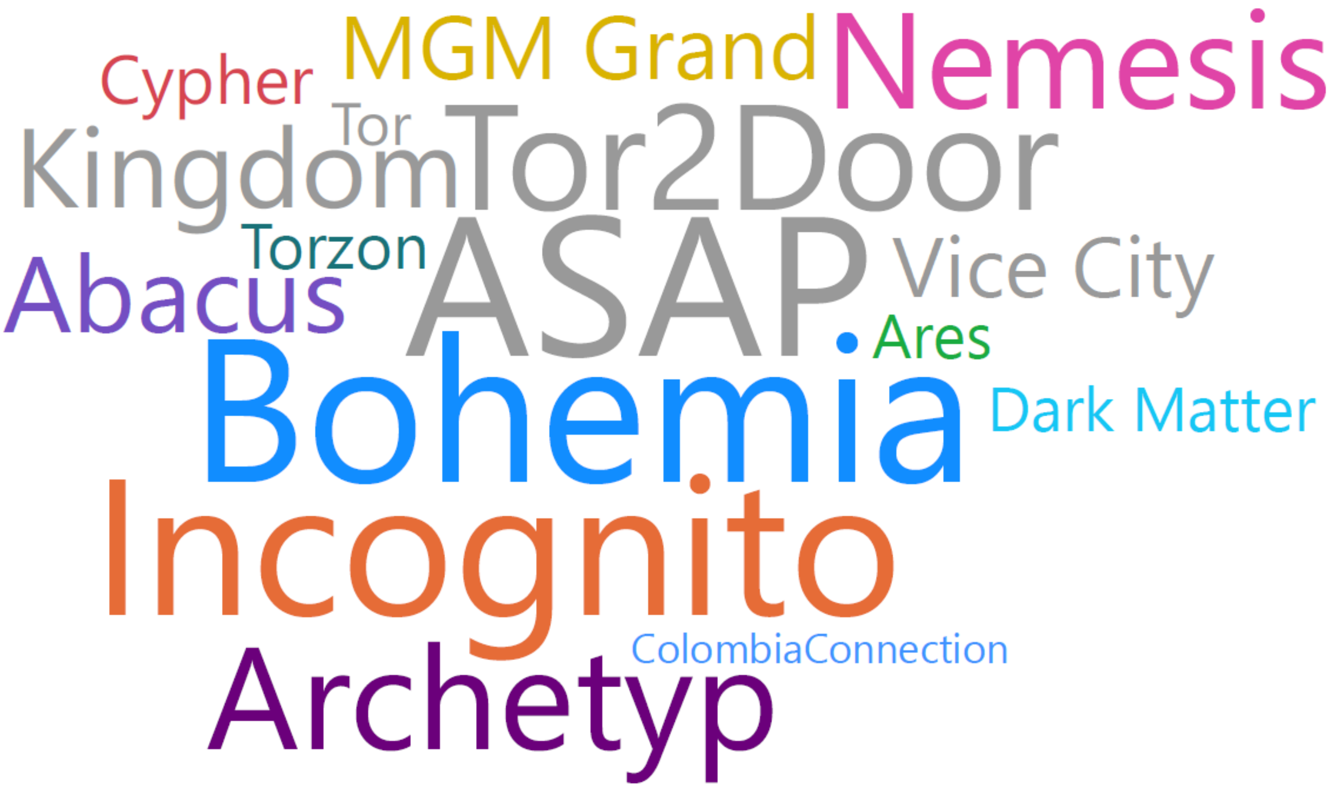
Key Findings

- From 1st February 2023 to 31st January 2024, 16 cryptomarkets were monitored, of which 11 remained active at the end of the reporting period.
- The three markets reaching more than 10,000 listings in a snapshot during this period were Bohemia, ASAP and Incognito.
- In the final month of monitoring, Incognito, Bohemia, Nemesis and Archetyp were the largest cryptomarkets.
- There was an average of 42,008 drug listings per snapshot in January 2024, with an estimated decrease in listings of -1.9% per month as compared to February 2023 (n=49,571), although new markets identified subsequently may offset this decline.
- Cannabis comprised the greatest percentage of drug listings from February 2023 to January 2024 (29%), followed by MDMA (8.0%), benzodiazepines (7.6%), cocaine (7.3%), opioids (excluding heroin) (6.2%), and meth/amphetamine (illicit) (5.8%).
- The market share of opioids (excluding heroin) showed the highest rate of increase from 5.2% in February 2023 to 6.8% in January 2024. Cannabis was the only drug class with a significant rate of decrease in market share, from 32% in February 2023 to 28% in January 2024.

Figure 1. Word cloud of cryptomarkets monitored from February 2023 to January 2024.



Note: The five cryptomarkets that closed before the end of January 2024 are in grey color font. The maximum size of the market (in the period from February 2023 to January 2024 as shown in Table 1) is proportional to the font size of the cryptomarket.

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Background

This bulletin series reports on trends in the availability and types of drugs sold on the internet via cryptomarkets over the last 12 months (a new bulletin is released typically every four months). The current bulletin focuses on analysis of drug listings on cryptomarkets from 1st February 2023 to 31st January 2024.

Drug Trends have identified, crawled (or 'scraped'), extracted, categorised and analysed drug listings on cryptomarkets on a regular basis since 1st January 2014, formerly using VBA programming processes, and since 9th August 2018 using a range of programmed automated processes in Python that operate with minimal manual input. Following extraction of common text features across each listing (e.g., drug listing name, vendor name), individual listings are then categorised according to a pre-specified drug classification structure. Drug categorisation is carried out through rules-based text-matching in the first instance, followed by a long short-term memory (LSTM) artificial neural network (target predictive percentage 90%) that has been trained on historically categorised listings for those not matched through the former process. Further background and information regarding the methods are available for download.

Panel A. Terminology

- **Cryptomarkets** ('darknet markets') are online marketplaces that facilitate the purchasing of illicit goods and services via multiple sellers, and provide their users with anonymity via its location on the hidden web. Our data collection and reporting focuses on drug listings advertised on cryptomarkets. A large proportion of listings are of prohibited drugs though licit drugs (e.g., alcohol, paracetamol) may occasionally be advertised on these platforms (Christin and Thomas, 2019).
- A **snapshot** of the cryptomarkets is taken on a twice monthly basis, in the two weeks starting on the 1st and 15th of each month.
- **Number of listings** is the sum of listings per snapshot belonging to a specific market and/or drug class. For this measure, duplicate listings (defined as listings with identical names by a single vendor on a single market within the same snapshot) are removed. Listings are further deduplicated for quantity variants (see **section 5.2.1** in the Methods document).
- **Market size** is defined as the number of drug listings per snapshot, overall, by market or by drug class.
- **Market share** is defined as the percentage of total drug listings by drug class.
- **Average monthly percent change (AMPC)** is the relative percent change in number or percentage of listings per month estimated using the Joinpoint regression program (National Cancer Institute, 2022).

Our reporting focuses on identified cryptomarkets which comply with the following: presented in English; have an accessible Tor link for scraping; have >1 vendor; vendors ship to and/or from Australia, or ship to and/or from multiple countries; and have had >100 drug listings. For a historical record of marketplaces monitored by Drug Trends, we refer the reader to our interactive timeline.

An accompanying public online interactive data visualisation is available, allowing viewers to interact with data collected since February 2014. Data in the current bulletin and the accompanying interactive visualisation are presented as twice monthly snapshots in each of the two weeks starting on the 1st and 15th of each month. We present data on number of listings observed in a given snapshot in the bulletin (see **Panel A**).

In this bulletin, we provide estimates of change over the 12-month reporting period by estimating average monthly percent change (AMPC) in number or proportion of listings per month. This is done using the Joinpoint regression program (National Cancer Institute, 2022) as detailed in the Methods document.

While these data can be considered reasonable estimates for trends in drug availability, we cannot guarantee exhaustive and/or immediate identification and capture of cryptomarkets once they emerge. As a result, there are some cryptomarkets which have existed for periods of time before our first scrape, resulting in a lack of data availability for these periods. In this bulletin, we show the date of the first post on a subDread[1] for each monitored market to give an indication of when that market may have started. There can also be challenges in certain periods of time (e.g., distributed denial of service (DDoS) attacks on sites) that prevent a routine scrape of an identified market.

Since our findings do not reflect the total of all cryptomarkets existing in the reporting period, the analysis and estimates in this bulletin should not be used to infer the number of drug listings across all cryptomarkets. Further, they should only be considered a proxy indicator of drug availability: we have not provided any metric that reflects sales or purchasing of drugs via cryptomarkets. See here for further discussion of caveats to interpretation.

There are various approaches to collecting, collating, categorising and analysing cryptomarket data, and inherent challenges in these processes. Our monitoring is an ongoing process. Refinements to our reporting processes in each bulletin are reported in the accompanying methods document. We welcome feedback and suggestions so that we can continue to improve utility of these data and our reporting on them (contact us at drugtrends@unsw.edu.au).

[1] Dread is a forum on the darkweb that is analogous to Reddit. A subDread is a forum group on Dread. The administrators of a cryptomarket often open a subDread for their cryptomarket. However, the market may not yet be fully functional as there can be several months of web development, beta testing and onboarding of vendors before a market becomes fully operational. Thus, it is likely that monitored cryptomarkets reported on in this bulletin reached our eligibility criteria sometime between their first subDread post and our first scrape.

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Findings

Profile of Cryptomarkets from 1st February 2023 to 31st January 2024

Which markets were monitored during this period?

The current bulletin reports findings for the time period 1st February 2023 to 31st January 2024 (**Figure 2**). See our interactive timeline for a historical record of the cryptomarkets monitored since February 2014. In the current reporting period, 16 cryptomarkets were monitored. **Table 1** shows the characteristics of these cryptomarkets since the date of our first scrape, noting that many of the cryptomarkets may have existed for some time before we started scraping them. Scraped data may be missing for some markets in certain periods (see **Figure 2**). In particular, we note that we performed a complete scrape for Abacus in the 1st July 2023 and 1st December 2023 snapshots only because the frequency of CAPTCHA was too labour-intensive for regular scraping. For this reason, Abacus is excluded from the analyses of trend over time in this bulletin. It is only be presented with respect to **Tables 1 and 5**, and **Figures 1, 2 and 6** which do not quantify trend in the number or proportion of listings over time.

Which markets closed during this period?

Of the 16 markets monitored in this bulletin, five markets (31% of monitored markets) closed within the reporting period for the following purported reasons (**Table 1**):

- ASAP was last scraped in the two weeks starting on 15th May 2023 and is considered to have closed due to a voluntary exit;
- Tor was last scraped in the two weeks starting on 15th May 2023 and claimed to be temporarily closed due to a voluntary exit;
- Vice City was last scraped in the two weeks starting on 15th August 2023 and is considered to have closed due to an exit scam;
- Tor2Door was last scraped in the two weeks starting on 1st September 2023 and is considered to have closed due to an exit scam;
- Kingdom was last scraped in the two weeks starting on 1st December 2023 and closed due to law enforcement seizure.

The other 11 markets remaining active at the end of the reporting period were Cypher, Bohemia, Incognito, Archetyp, Abacus, Ares, MGM Grand, Colombia Connection, Nemesis, Dark Matter and Torzon (**Table 1**). However, there have been reports of difficulties accessing funds in the Bohemia marketplace since the end of last year which raised concerns around the reliability of the market for sale transactions. Note that Abacus market remained active at the end of the reporting period, even though it had complete scrapes in the 1st July 2023 and 1st December 2023 snapshots only.

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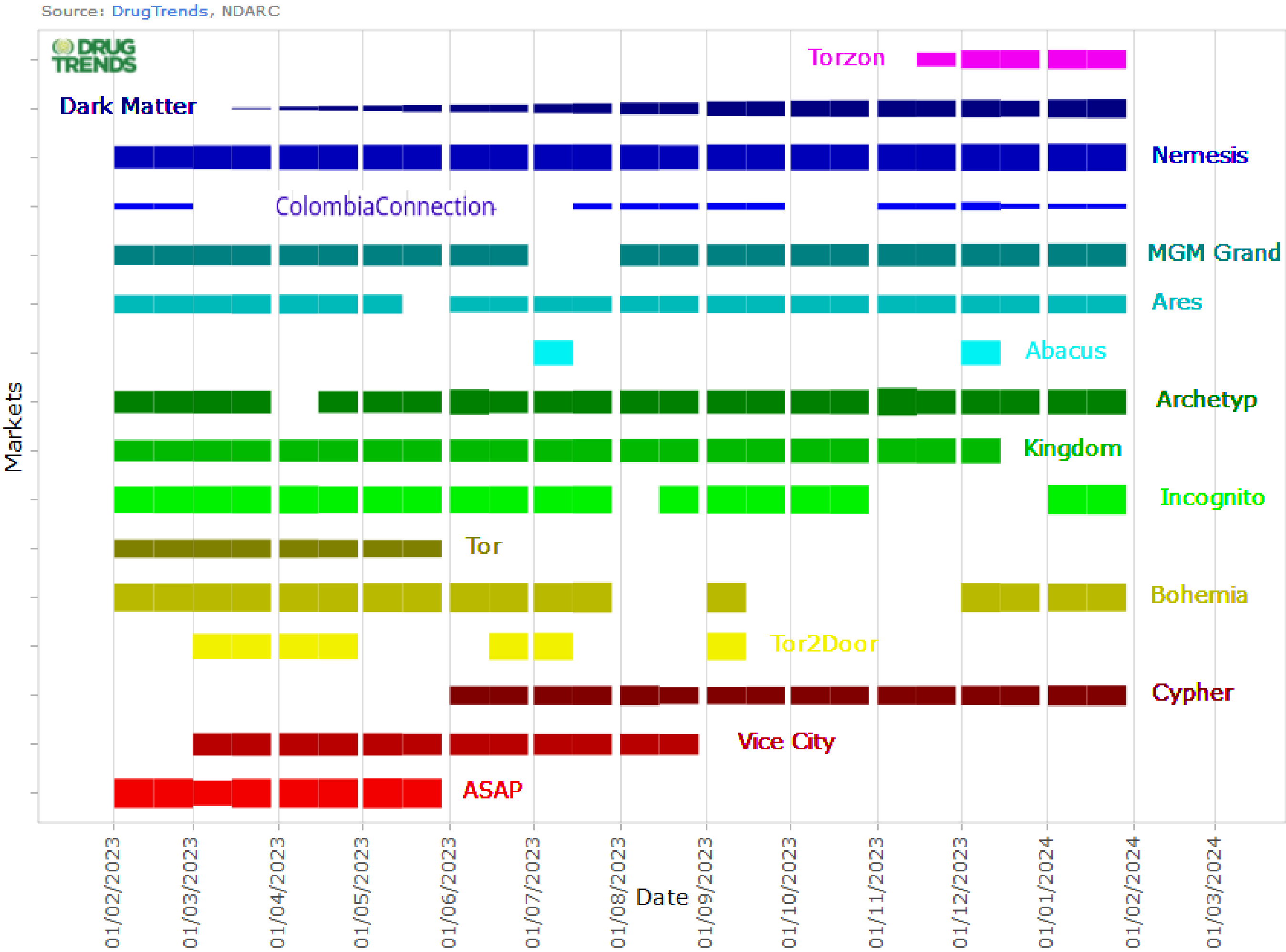
Figure 2. Markets monitored from February 2023 to January 2024.



Note: There are short breaks at the end of each month because the twice-monthly snapshots are based on two-week intervals starting on the 1st and 15th of each month, i.e., days of the month after the 28th are excluded from monitoring. Extended breaks indicate periods where market crawling was not achievable or incomplete. The width of the bar is proportional to the log of the number of drug listings observed in each snapshot for each market. Data are missing for Cypher in the months of February to May 2023 because of scripting error.

Table 1. Characteristics of markets identified in this bulletin (ordered by date of first snapshot).

Market	Status as at Jan 2024 (reported reason[a])	Earliest subDread post	First snapshot	Last snapshot	Duration in months[b]	Maximum number of listings[c]
ASAP	Closed (voluntary exit)	9th Apr 2020	1st May 2021	15th May 2023	25.0	11,435
Vice City	Closed (exit scam)	26th Aug 2020	1st May 2021	15th Aug 2023	28.0	3,435
Cypher	Open	8th Feb 2020	1st Jun 2021	Ongoing[d]	32.0*	2,285
Bohemia	Open	23rd May 2021	15th Jul 2021	Ongoing[d]	30.5*	11,828
Tor2Door	Closed (exit scam)	3rd Jul 2020	15th Jul 2021	1st Sep 2023	26.0	8,047
Tor	Closed (voluntary exit)	--[e]	15th Aug 2021	15th May 2023	21.5	1,672
Incognito	Open	19th Oct 2020	1st Oct 2021	Ongoing[d]	28.0*	11,103
Kingdom	Closed (law enforcement)	3rd May 2021	1st Jan 2022	1st Dec 2023	23.5	5,346
Archetyp	Open	19th Apr 2020	15th Jan 2022	Ongoing[d]	24.5*	7,707
Abacus	Open	27th Sep 2020	15th Feb 2022	Ongoing[d, f]	23.5*	5,121
Ares	Open	26th Aug 2021	15th May 2022	Ongoing[d]	20.5*	1,843
MGM Grand	Open	26th Apr 2021	15th May 2022	Ongoing[d]	20.5*	3,695
Colombia Connection	Open	3rd Nov 2020	15th Jul 2022	Ongoing[d]	18.5*	309
Nemesis	Open	5th Jun 2021	1st Feb 2023	Ongoing[d]	12.0*	7,026
Dark Matter	Open	22nd Sep 2022	15th Mar 2023	Ongoing[d]	10.5*	1,841
Torzon	Open	15th Nov 2022	15th Nov 2023	Ongoing[d]	2.5*	1,947

Note: [a] Most probable reason for closure is given in brackets. [b] Duration of monitoring is the number of months between the start of the first snapshot and the end of the last snapshot, including when data could not be scraped from the cryptomarket. Where the cryptomarket was still active and monitored as of 31st January 2024 (indicated by *), the duration is computed as the number of months between the first snapshot and 31st January 2024. [c] Maximum number of listings in a scrape is computed from the snapshots over the 12-month reporting period. [d] The cryptomarket was active as of 31st January 2024. [e] Tor's subDread could not be found on Dread. [f] Abacus was still active as of 31st January 2024; however, we only scraped the whole market in the 1st July 2023 and 1st December 2023 snapshots in this 12-month period.

What markets were monitored for the first time during this period?

Of the 16 markets in this reporting period, three markets were monitored for the first time. These are:

- Nemesis, with the first snapshot occurring on 1st February 2023;
- Dark Matter, with the first snapshot occurring on 15th March 2023; and
- Torzon, with the first snapshot occurring on 15th November 2023.

These markets were still active and being monitored at the end of January 2024.

Which markets from this period have been monitored for the longest?

Of the 16 markets monitored, the following markets have been monitored for two years or more:

- Cypher for 32 months since 1st June 2021 (ongoing);
- Bohemia for 30.5 months since 15th July 2021 (ongoing);
- Incognito for 28 months since 1st October 2021 (ongoing);
- Vice City for 28 months between 1st May 2021 and 15th August 2023;
- Tor2Door for 26 months between 15th July 2021 and 1st September 2023;

- ASAP for 25 months between 1st May 2021 and 15th May 2023; and
- Archetyp for 24.5 months since 15th January 2022 (ongoing).

As noted above, some of the cryptomarkets may have existed for some time before we started scraping them as indicated by the earliest date of the subDread forum posts (**Table 1**). Of these longest-running markets, Vice City, Tor2Door and ASAP closed before the end of January 2024.

Which markets from this period were the largest based on number of drug listings?

The markets reaching more than 10,000 listings in a snapshot (**Table 1**) were:

- Bohemia with maximum number of listings in a snapshot of 11,828;
- ASAP with maximum number of listings in a snapshot of 11,435; and
- Incognito with maximum number of listings in a snapshot of 11,103.

The smallest of the scraped cryptomarkets, with a maximum of less than 1,000 listings per snapshot, was Colombia Connection (**Table 1**).

In the final month (January 2024), 10 markets were scraped. The markets whose mean number of listings per snapshot (including interpolated data for missing scrapes) was above the average of 4,201 listings in January 2024 were (**Table 2**):

- Incognito with an average of 10,874 listings per snapshot;
- Bohemia with an average of 7,824 listings per snapshot;
- Nemesis with an average of 6,952 listings per snapshot; and
- Archetyp with an average of 5,040 listings per snapshot.

Did the total market size (based on number of drug listings in the 16 monitored markets) change over this period?

The average monthly percent change in market size (or number of listings interpolated for missed scrapes in each cryptomarket) decreased over the reporting period (-1.9% per month; **Figure 3**; **Table 2**). This can be explained by the closure of five cryptomarkets as described above, the biggest of which was ASAP with a maximum of 11,435 listings. However, we have identified new cryptomarkets (e.g. Nexus, Elysium, Quantum and Euphoria) satisfying our criteria which we have not yet started scraping, which could potentially offset this decline.

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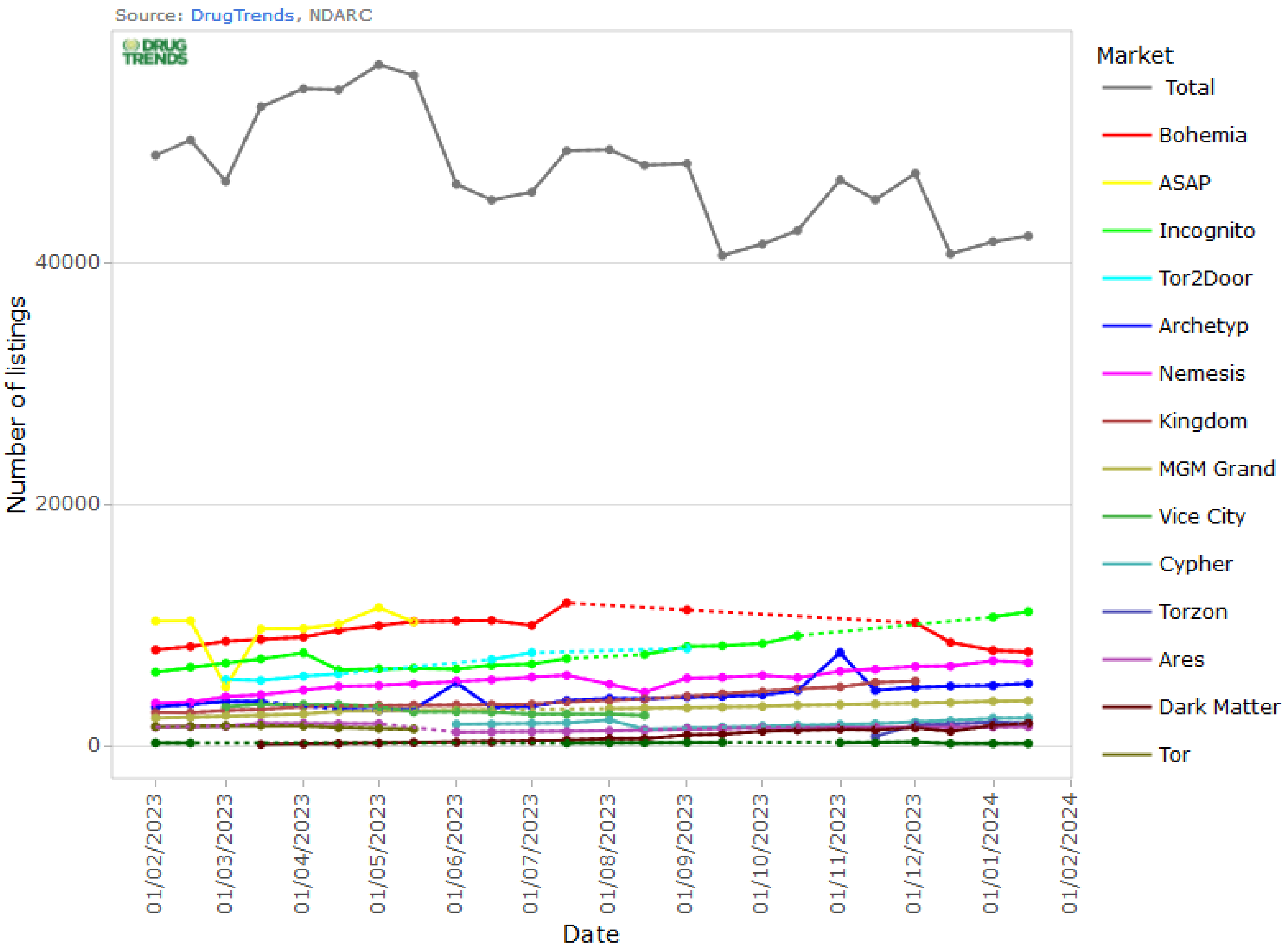
Figure 3. Number of drug listings by marketplace from February 2023 to January 2024.



Note: Complete interactive visualisation available here. Abacus was excluded because it only had two scrapes in the 12-month period. The dark grey line shows the total number of drug listings interpolated for missed scrapes across all markets except Abacus. Dashed lines indicate interpolated data over periods where a market could not be monitored. The markets are ordered by maximum number of listings per snapshot over the 12-month period as shown in Table 1.

Table 2. Number of drug listings (including interpolated data for missed scrapes) and average monthly percent change (AMPC in %) on the markets monitored from February 2023 to January 2024.

Market (Number of months) [a]	First snapshot [b]	Last snapshot [b]	Mean in Feb 2023 [c]	Mean in Jan 2024 [c]	AMPC (95%CI) [d]
Incognito (12)	6,086	11,103	6,292	10,874	**5.4 (5.0, 6.0)***
ASAP (4)	10,318	10,238	10,326	– [f]	6.5 (-14.3, 32.6)
Tor2Door (7.5)	5,466	8,047	5,422	– [f]	**5.8 (5.5, 6.1)***
Bohemia (12)	7,932	7,766	8,066	7,824	**-0.6 (-1.5, -0.1)***
Nemesis (12)	3,507	6,879	3,544	6,952	**6.2 (5.5, 7.1)***
Kingdom (10.5)	2,735	5,346	2,726	– [f]	**7.2 (6.9, 7.5)***
Archetyp (12)	3,186	5,127	3,301	5,040	**4.8 (2.9, 6.7)***
MGM Grand (12)	2,280	3,695	2,308	3,682	**4.4 (4.2, 4.6)***
Vice City (7)	3,205	2,496	3,148	– [f]	**-3.1 (-3.8, -2.2)***
Cypher (12)	1,765	2,285	1,087	2,275	**6.8 (6.0, 7.6)***
Dark Matter (10.5)	93	1,841	– [e]	1,755	**32 (30, 34)***
Torzon (2.5)	754	1,814	– [e]	1,880	46 (-37, 231)
Ares (12)	1,538	1,564	1,552	1,558	0.3 (-0.3, 0.8)
Tor (4)	1,566	1,370	1,584	– [f]	**-4.1 (-5.4, -2.6)***
Colombia Connection (12)	216	165	212	166	**-2.6 (-4.6, -1.0)***
Total (12)	39,364	42,239	49,571 [g]	42,008 [g]	**-1.9 (-3.1, -0.8)***

Note: [a] 'Number of months' is the number of months between the first and last snapshot in the 12-month period, including when data could not be scraped from the cryptomarket. [b] Note that the 'first snapshot' and the 'last snapshot' of each individual market are their respective first and last scrape in the 12-month period, while the 'first snapshot' and the 'last snapshot' in the 'total' row corresponds to the total number of listings in the overall market in the 1st February 2023 and the 15th January 2024 snapshots, respectively. As such, the number of listings in the 'first snapshot' and the 'last snapshot' of the individual markets do not sum to the number of listings in the 'total' row. [c] The mean in February 2023 and January 2024 are calculated as the mean of the number of listings including the interpolated number of listings for missed scrapes. [d] Average monthly percent change (AMPC) in number of listings is the estimated percent change in number of listings on the cryptomarket (or market size) per month. Because regular data points are required, intervening data points with no data were interpolated for estimating AMPC. The estimates that are statistically significant at $p<0.05$ have 95% confidence intervals (95%CI) that do not include 0. They are marked with "*" and highlighted in bold. [e] Dark Matter and Torzon had not yet started in February 2023. [f] ASAP, Tor2Door, Kingdom, Vice City, and Tor closed before January 2024. [g] The mean number of listings in the 'total' row are the total number of listings across all markets after interpolating for missed scrapes. As such, the mean number of listings in the 'total' row are different from the 'total' row data presented in Table 4 which excludes interpolated data. Abacus was also excluded from the means of the total because it only had two scrapes in the 12-month period.

Did the size of the individual markets change over the period?

Of the 15 cryptomarkets (excluding Abacus), 8 had a significant rate of increase in number of listings (Table 2). Dark Matter had the greatest increase of 32% per month but it started as one of the smallest markets in this 12-month period, from 93 listings in the first snapshot of 15th March 2023 to 1,841 in the last snapshot over 10.5 months. This was followed by:

- Kingdom with an increase of 7.2% per month to 5,346 listings in the 1st December 2023 snapshot over 10.5 months;
- Cypher with an increase of 6.8% per month to 2,285 listings in the 15th January 2024 snapshot over 12 months;
- Nemesis with an increase of 6.2% per month to 6,879 listings in the 15th January 2024 snapshot over 12 months;
- Tor2Door with an increase of 5.8% per month to 8,047 listings in the 1st September 2023 snapshot over 7.5 months;

- Incognito with an increase of 5.4% per month to 11,103 listings in the 15th January 2024 snapshot over 12 months;
- Archetyp with an increase of 4.8% per month to 5,127 listings in the 15th January 2024 snapshot over 12 months; and
- MGM Grand with an increase of 4.4% per month to 3,695 listings in the 15th January 2024 snapshot over 12 months.

Four markets had a significant rate of decrease (Vice City, Tor, Bohemia and Colombia Connection). Vice City and Tor decreased in their number of listings as they came to a closure, while the decrease in number of listings on Bohemia coincided with reports of difficulties accessing funds since October 2023. We also note that certain pages of the listings on Colombia Connection could not be accessed since the 15th December 2023 snapshot because of server-side issues which accounted for the drop in number of listings.

Main Drugs Sold via Cryptomarkets from 1st February 2023 to 31st January 2024

Market listings captured through cryptomarket monitoring have been categorised into drug classes according to this methodology. Abacus was excluded from the analyses of trend over time in drugs available for sale because it only had two scrapes in the 12-month period.

What were the main drugs sold via cryptomarkets during this period?

Cannabis comprised the bulk of the listings identified across the 15 markets (excluding Abacus) over the 12-month period (29%) (see Table 3, **Figure 4** and **Figure 5**). This was followed by:

- MDMA, with 8% of listings;
- Benzodiazepines, with 7.6% of listings;
- Cocaine, with 7.3% of listings;
- Opioids (excluding heroin), with 6.2% of listings; and
- Meth/amphetamines (illicit), with 5.8% of listings.

New psychoactive substances (NPS) comprised 4.4% of listings; however, it should be noted that new drugs may have appeared since we created our dictionary terms (see methods of our earlier summary bulletin for further detail) that may not have been captured as NPS. We plan to update our dictionary terms for NPS and our machine learning model for drug listing categorisation in the future.

Did the market share of the main drugs sold via cryptomarkets change over this period?

Opioids (excluding heroin) had the greatest rate of relative increase in market share (2.8% per month) from February 2023 to January 2024 (5.2% of all drug listings to 6.8%, respectively; Table 3 and **Figure 4**). This is followed by:

- Other psychostimulants & nootropics increasing at 1.9% per month, from 2.9% to 3.6%;
- Heroin increasing at 1.6% per month, from 2.1% to 2.4%;
- PIEDs/weight loss increasing at 1.2% per month, from 5.2% to 5.7%;

- Ketamine increasing at 1.1% per month, from 4.6% to 5.1%;
- Benzodiazepines increasing at 1.0% per month, from 6.6% to 7.7%; and
- MDMA increasing at 0.8% per month, from 7.3% to 8.1%.

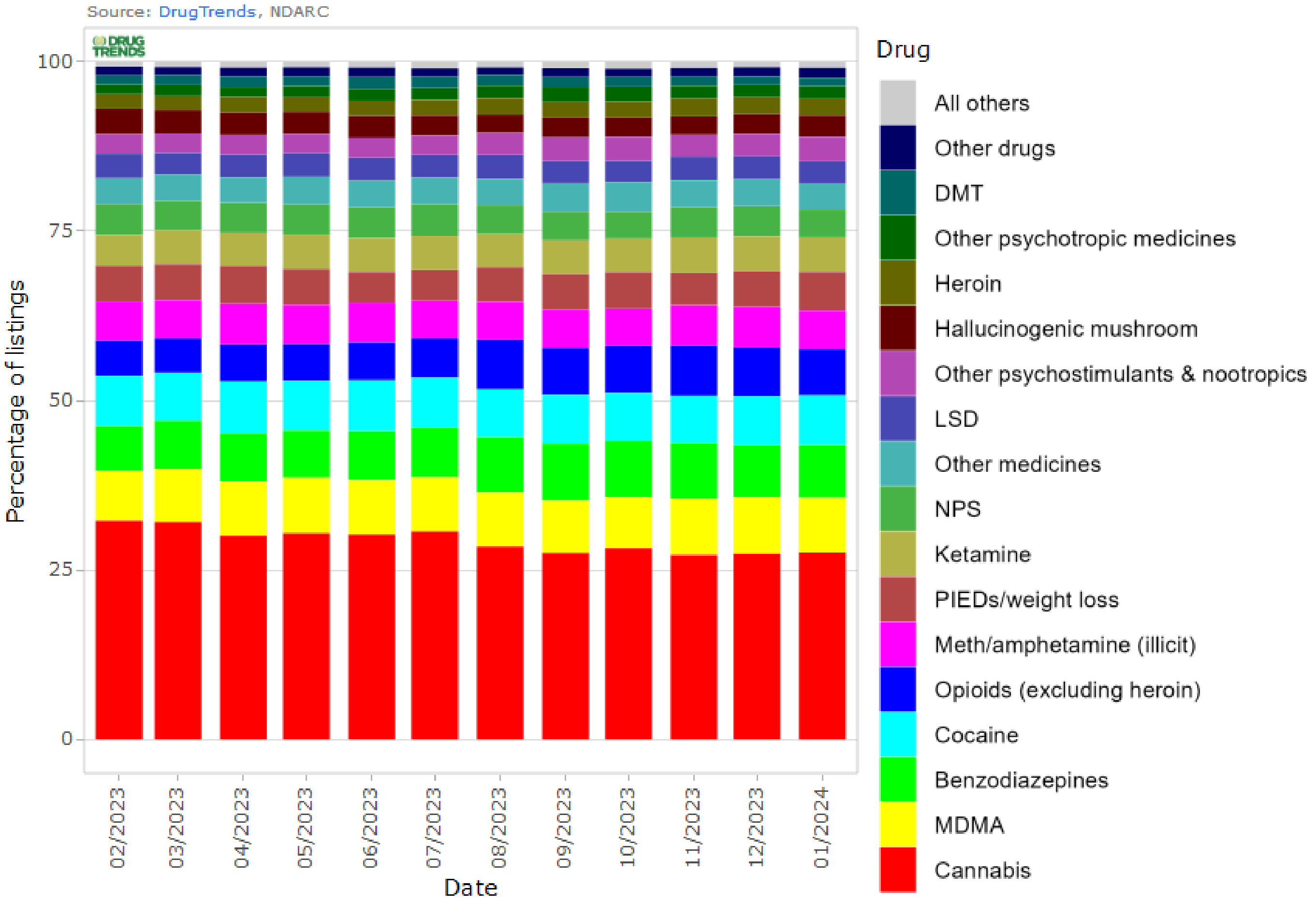
Cannabis was the only drug with a significant relative decrease in market share (-1.6% per month) from February 2023 to January 2024 (32% of all drug listings to 28%, respectively; Table 3 and Figure 4).

Table 3. Market share (percentage of listings) by drug class, and their average monthly percent change (AMPC in %) from February 2023 to January 2024.

	Market share (percentage of listings)[a]			AMPC (95%CI)[b]
Drug	**Overall**	**Feb 2023**	**Jan 2024**	
Cannabis	29	32	28	**-1.6 (-2.0, -1.2)***
MDMA	8.0	7.3	8.1	**0.8 (0.3, 1.2)***
Benzodiazepines	7.6	6.6	7.7	**1.0 (0.5, 1.5)***
Cocaine	7.3	7.4	7.4	-0.3 (-0.7, 0.1)
Opioids (excluding heroin)	6.2	5.2	6.8	**2.8 (2.2, 3.3)***
Meth/amphetamines (illicit)	5.8	5.8	5.7	0.0 (-0.5, 0.5)
PIEDs/weight loss [c]	5.1	5.2	5.7	**1.2 (0.3, 2.2)***
Ketamine	5.0	4.6	5.1	**1.1 (0.3, 1.9)***
NPS	4.4	4.6	4.1	-0.5 (-1.3, 0.2)
Other medicines [d]	4.0	3.8	3.9	0.5 (-0.2, 1.1)
LSD	3.4	3.6	3.2	-0.3 (-1.0, 0.4)
Other psychostimulants & nootropics	3.1	2.9	3.6	**1.9 (1.2, 2.6)***
Hallucinogenic mushroom	3.1	3.8	3.2	-0.9 (-2.3, 0.2)
Heroin	2.3	2.1	2.4	**1.6 (0.8, 2.3)***
Other psychotropic medicines [e]	1.8	1.4	1.9	–[g]
DMT	1.5	1.4	1.3	–[g]
Other drugs	1.3	1.3	1.5	–[g]
GHB/GBL/1,4-BD	0.43	0.37	0.51	–[g]
Total [f]	100.0	100.0	100.0	–

Note: [a] Market share is the proportion of the number of listings of the drug as a percentage of the number of all drug listings per snapshot across all marketplaces observed in the stated period. [b] Average monthly percent change (AMPC) in market share is the estimated relative percent change in percentage of listings of the particular drug per month. The estimates that are statistically significant at p<0.05 have 95% confidence intervals (95%CI) that do not include 0. They are marked with "*" and highlighted in bold. [c] PIEDs: performance and image enhancing drugs. Please refer to our interactive visualisation for examples. [d] These are all other medicines not in other categories of drugs. Please refer to our interactive visualisation for examples. [e] These are pharmaceutical drugs with psychotropic effects excluding drugs already in other categories of drugs, e.g. psychostimulants and opioids which are in their specific classes of 'other psychostimulants & nootropics' and 'opioids (excluding heroin)', respectively. Please refer to our interactive visualisation for examples. [f] The 'total' row includes all drug listings presented in our bulletin including those not shown in this table due to small values, i.e. alcohol, e-cigarette, inhalants, MDA, paraphernalia, PCP and tobacco, with each constituting <0.5% of the overall market share. However, GHB/GBL/1,4-BD is still shown because of recent interest in this drug in Australia. [g] Estimates of AMPC for market share are not shown where overall percentage of listings of the drug is <2% due to unreliability of estimates.

Figure 4. Percentage breakdown of listings by month and drug class over time from February 2023 to January 2024.



Note: Complete interactive visualisation available here. 'All others' category comprised alcohol, e-cigarette, GHB/GBL/1,4-BD, inhalants, MDA, paraphernalia, PCP and tobacco, with each constituting <0.5% of the overall market share.

Did the market size (based on the number of listings) of the main drugs sold via cryptomarkets change over this period?

A significant change in number of listings was only observed for other medicines (-3.1% per month; Table 4). Please refer to our interactive visualisation for examples of other medicines. The lack of statistical significance in change over time could be because of the fluctuations in number of listings.

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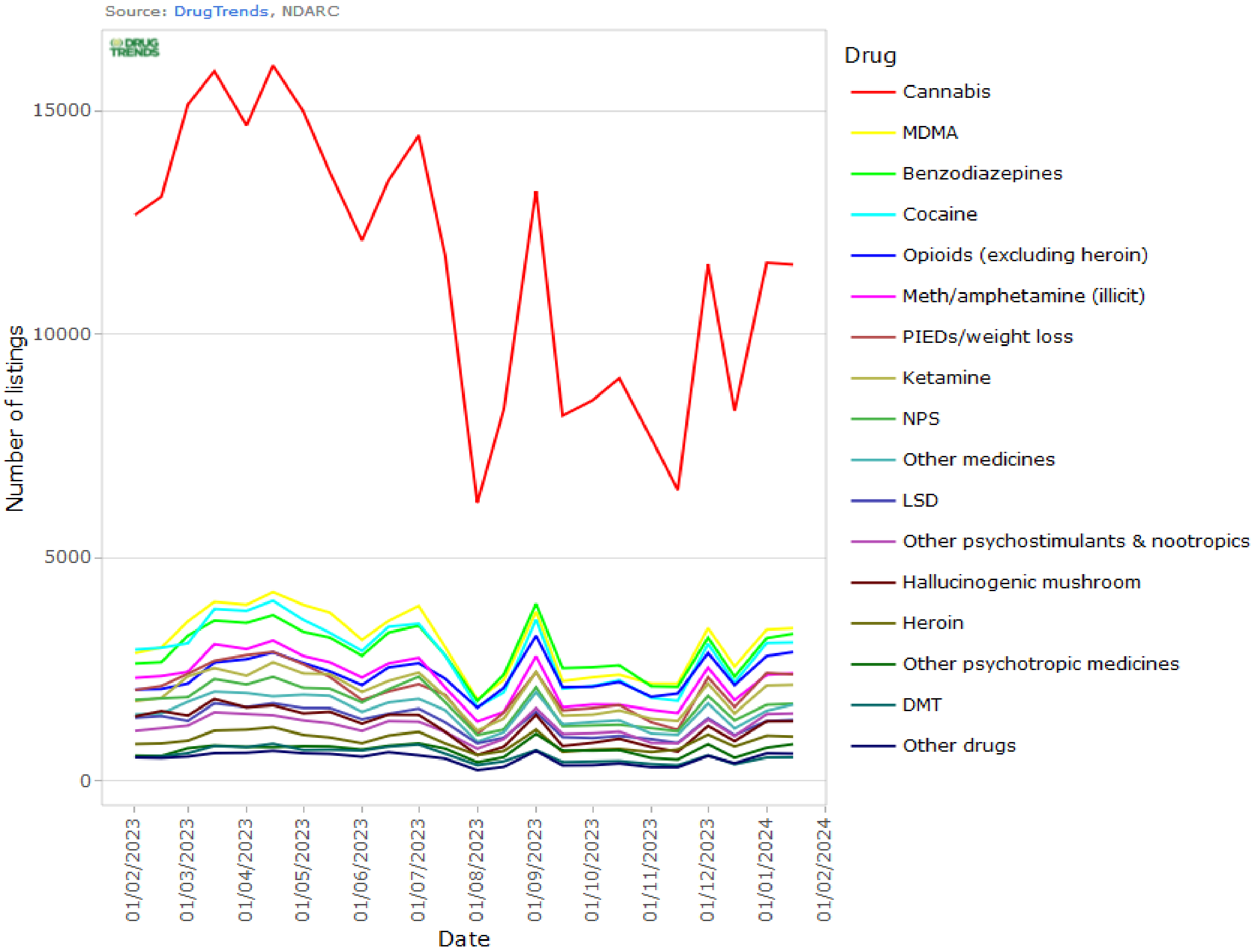
Figure 5. Number of listings disaggregated by drug class for all markets from February 2023 to January 2024.



Note: The drug classes with small number of listings, each comprising <0.5% of the overall market share (i.e. alcohol, e-cigarette, GHB/GBL/1,4-BD, inhalants, MDA, paraphernalia, PCP and tobacco) are not shown in the figure. To view the data on all drug classes, please see our interactive visualisation.

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Table 4. Market size (number of listings) by drug class and their average monthly percent change (AMPC in %) from February 2023 to January 2024.

	Market size (Mean number of listings) [a]			
Drug	**Overall**	**Feb 2023**	**Jan 2024**	**AMPC (95%CI) [b]**
Cannabis	11,494	12,874	11,578	-2.8 (-7.1, 0.2)
MDMA	3,095	2,928	3,407	2.1 (-1.6, 7.0)
Benzodiazepines	2,906	2,648	3,250	-1.9 (-4.5, 0.7)
Cocaine	2,855	2,963	3,097	-1.5 (-6.3, 2.0)
Opioids (excluding heroin)	2,369	2,058	2,845	0.1 (-2.3, 2.5)
Meth/amphetamines (illicit)	2,249	2,330	2,394	-1.6 (-6.1, 1.7)
PIEDs/weight loss [c]	2,009	2,086	2,403	-0.4 (-5.2, 2.8)
Ketamine	1,944	1,824	2,150	2.2 (-1.9, 7.3)
NPS	1,705	1,834	1,721	-2.2 (-6.6, 1.1)
Other medicines [d]	1,541	1,504	1,643	**-3.1 (-5.8, -0.3)***
LSD	1,308	1,438	1,356	-1.8 (-6.1, 1.3)
Hallucinogenic mushroom	1,226	1,509	1,340	-2.2 (-7.4, 1.3)
Other psychostimulants & nootropics	1,209	1,154	1,508	0.8 (-3.5, 4.0)
Heroin	890	838	1,007	2.5 (-0.9, 6.5)
Other psychotropic medicines [e]	690	564	788	-0.7 (-3.4, 2.0)
DMT	572	545	530	0.2 (-3.3, 4.6)
Other drugs	504	522	616	-0.1 (-5.6, 3.7)
GHB/GBL/1,4-BD	167	149	214	-1.5 (-5.4, 2.4)
Total [f]	38,899	39,908	42,008	-1.4 (-5.6, 1.6)

Note: [a] This shows the mean number of listings per snapshot across all marketplaces observed in the stated period. [b] Average monthly percent change (AMPC) in market size is the estimated relative percent change in number of listings of the particular drug per month. The estimates that are statistically significant at $p<0.05$ have 95% confidence intervals (95%CI) that do not include 0. They are marked with "*" and highlighted in bold. [c] PIEDs: performance and image enhancing drugs. Please refer to our interactive visualisation for examples. [d] These are all other medicines not in other categories of drugs. Please refer to our interactive visualisation for examples. [e] These are pharmaceutical drugs with psychotropic effects excluding drugs already in other categories of drugs, e.g. psychostimulants and opioids which are in their specific classes of 'other psychostimulants & nootropics' and 'opioids (excluding heroin)', respectively. Please refer to our interactive visualisation for examples. [f] The 'total' row includes all drug listings presented in our bulletin including those not shown in this table due to small values, i.e. alcohol, e-cigarette, inhalants, MDA, paraphernalia, PCP and tobacco, with each constituting <0.5% of the overall market share. However, GHB/GBL/1,4-BD is still shown because of recent interest in this drug in Australia.

What drugs did the different markets sell over this period?

Figure 6 shows the breakdown of listings by drug class per market during the 12-month reporting period. The analyses shows that most markets monitored listed an array of different drugs. Note that this section includes data from Abacus as we analyse the aggregate data over this 12-month period. The market share of cannabis varied between 23% for Dark Matter and 41% for Tor with a relative difference[2] from the overall market of -23% and 38%, respectively (Table 5). The following markets have some of the highest proportion of listings from particular drug classes as shown in **Figure 6** and Table 5:

[2] The relative difference in market share of a drug is the difference in market share of the drug in the individual market from the overall market as a proportion of the overall market share of that drug. Please refer to section 6.1.2 of methods for further details.

- Torzon had the highest percentage of MDMA and ketamine listings (relative difference of 45% and 32% from overall market, respectively).
- Ares had the highest percentage of heroin, cocaine and DMT listings (relative difference of 118%, 37% and 60% from overall market, respectively).
- Nemesis had the highest percentage of benzodiazepine listings (relative difference of 27% from overall market) though differences between markets on percentage of benzodiazepine listings is not as pronounced as for many of the other drug classes.
- Colombia Connection, followed by MGM Grand, had the highest percentage of listings comprising opioids excluding heroin (relative difference of 195% and 116%, respectively, from overall market).
- Kingdom had the highest percentage of listings comprising meth/amphetamines (illicit) (relative difference of 45% from overall market).
- Dark Matter, followed closely by Abacus, had the highest percentage of PIEDs/weight loss drugs (relative difference of 54% and 52%, respectively, from overall market).
- Tor and Nemesis had the highest percentage of other medicines listings (relative difference of 67% and 52%, respectively, from overall market). Tor and Abacus had the highest percentage of listings for other psychotropic medicines (relative difference of 118% and 47%, respectively, from overall market).
- Colombia Connection and MGM Grand had the highest percentage of listings for other psychostimulants and nootropics (relative difference of 127% and 63%, respectively, from overall market).

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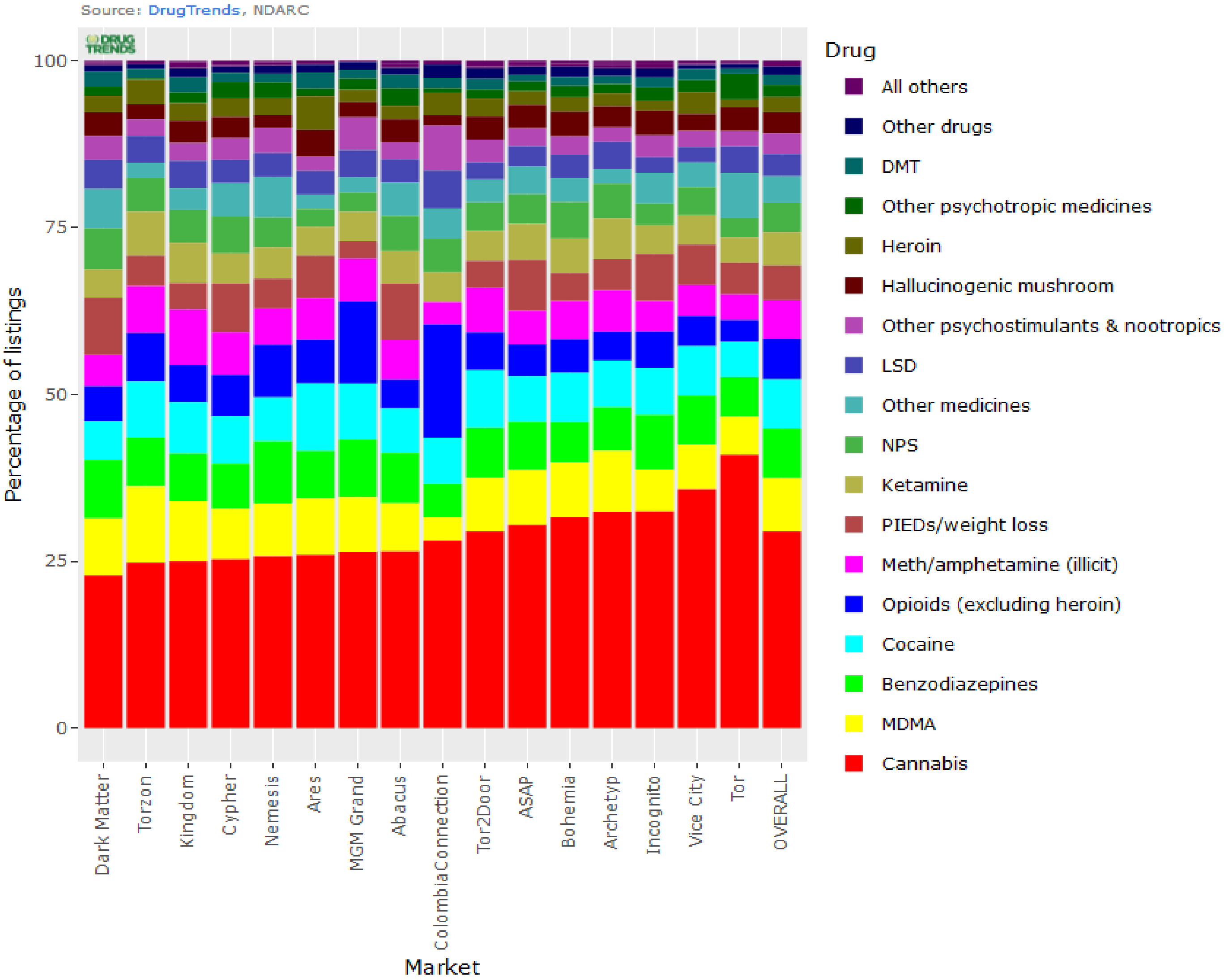
Figure 6 Drug composition of markets monitored from February 2023 to January 2024 (in ascending order by proportion of cannabis listings, and overall market in last column).



Note: This figure displays drug class percentage of all listings observed from 1st February 2023 to 31st January 2024) for each marketplace monitored. See **Figure 2** and our interactive timeline for the duration of monitoring each market. "All others" comprised drugs or related products that each constitute <0.5% of listings over the reporting period. These are alcohol, e-cigarette, GHB/GBL/1,4-BD, inhalants, MDA, paraphernalia, PCP and tobacco.

Table 5. Relative percent difference in drug market share between each market and the overall market from February 2023 to January 2024.

Market	Cannabis	MDMA	Benzodiazepines	Cocaine	Opioids (excluding heroin)	Meth/amphet-amines (illicit)	PIEDs/ weight loss	Ketamine	NPS	Other medicines	LSD	Other psycho-stimulants & nootropics	Hallucinogenic mushroom	Heroin	Other psycho-tropic medicines	DMT	Other drugs	All others
Dark Matter	-23**	8	20	-22	-8	-18	54**	-13	38	46*	33	19	10	6	-21	56	-29	-28
Torzon	-16**	45**	-2	14	28*	23	-19	32*	12	-44**	24	-19	-29	58**	-86**	-2	-46	-44
Kingdom	-16**	15	-4	5	-2	45**	-30**	20*	12	-20	24	-11	4	15	-10	52**	12	23
Cypher	-15**	-4	-9	-2	8	11	30*	-9	23	24	6	10	-3	22	36	-7	-26	-1
Nemesis	-13**	0	27**	-10	38**	-5	-20**	-5	-1	52**	9	28**	-43**	9	33*	-9	-3	-20
Ares	-13*	7	-4	37**	15	9	14	-12	-41**	-46**	9	-28	23	118**	-36	60*	-4	-32
MGM Grand	-11**	3	17*	14	116**	12	-53**	-11	-35**	-43**	24	63**	-30*	-17	-8	-9	-9	-74**
Abacus	-11**	-9	2	-8	-25**	3	52**	-1	18	23*	6	-15	6	-9	47**	39*	-21	22
Colombia Connection	-5	-54	-32	-7	195**	-45	–	-9	12	13	67	127*	-58	39	-49	-7	44	-49
Tor2Door	-1	1	2	18**	-1	17*	-29**	-9	-5	-14	-23**	15	7	18	-22	8	29	23
ASAP	2	5	-2	-6	-17**	-12*	36**	9	0	4	-7	-12	8	-12	-20	-30**	-1	1
Bohemia	6**	4	-18**	2	-13*	-1	-25**	4	22**	-11	7	-7	14	-4	-5	-11	24	-1
Archetyp	9**	16*	-11	-5	-24**	9	-16	22*	15	-43**	22	-26*	-3	-16	-24	-18	-4	20
Incognito	9**	-20**	11	-4	-5	-21**	27**	-13	-30**	16*	-29**	9	14	-38**	15	0	13	25
Vice City	21**	-16	0	1	-20*	-20	9	-12	-5	-10	-28*	-20	-22	45**	-3	20	-57**	-27
Tor	38**	-28*	-19	-28*	-43**	-32*	-15	-24	-35*	67**	22	-25	12	-52*	118**	-43	-54	-34

Note: Each column is colour coded to highlight the lowest numbers in green, the mid-range numbers in yellow and highest numbers in purple, following the colour scale range. ** relative difference is statistically significant at *p*<0.001, and * indicate relative difference is statistically significant at *p*<0.01. Numbers in bold indicate statistically significant difference at p<0.001 or p<0.01. 'All others' category comprised alcohol, e-cigarette, GHB/GBL/1,4-BD, inhalants, MDA, paraphernalia, PCP and tobacco, with each constituting <0.5% of the overall market share.

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Related Links

- Data visualisations: https://drugtrends.shinyapps.io/cryptomarkets
- For more research from the Drug Trends program go to: https://ndarc.med.unsw.edu.au/program/drug-trends

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