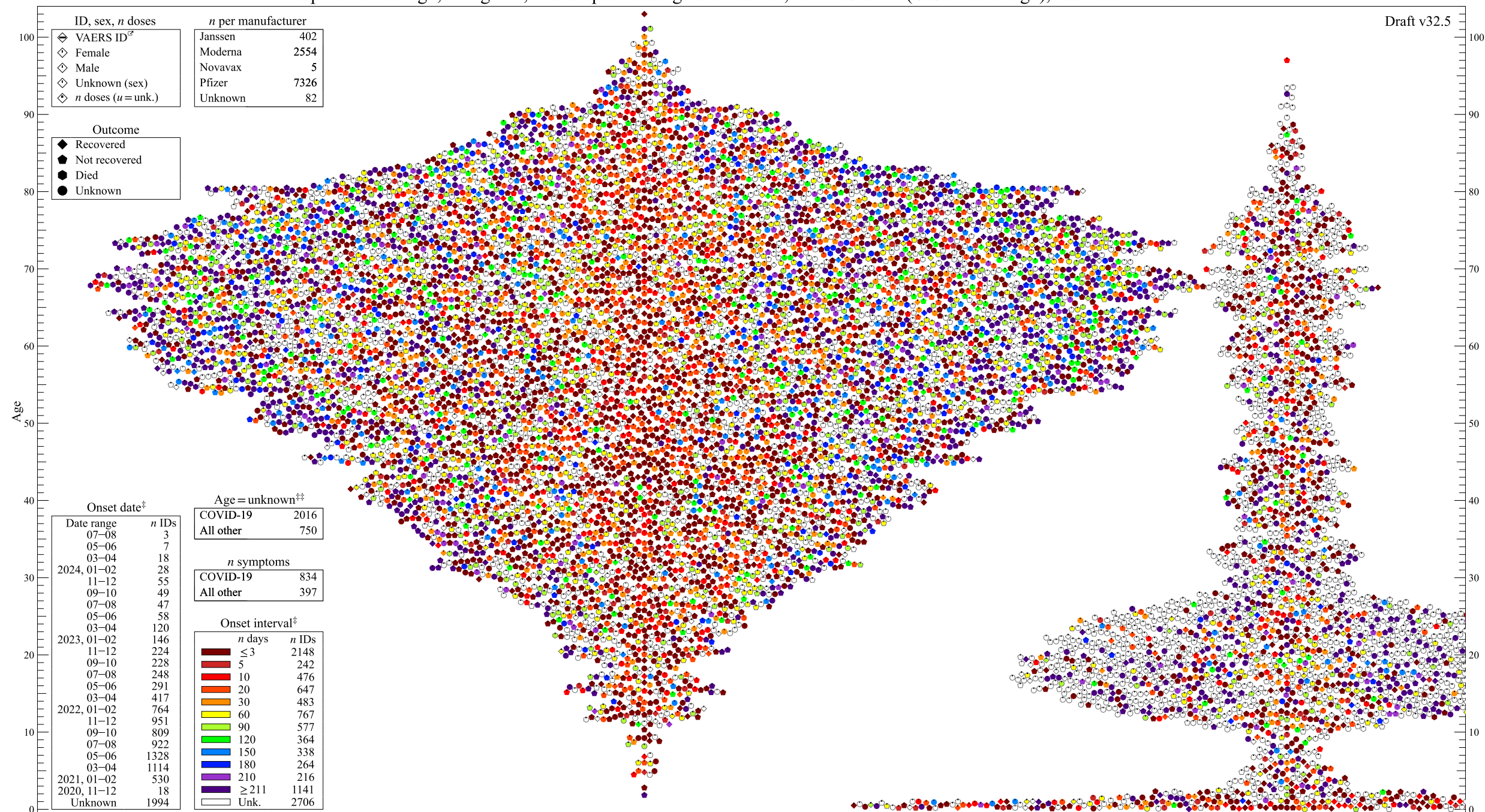# Neoplasms − benign, malignant, and unspecified: age distribution, VAERS data* (U.S. and foreign), 1990.07−2024.08.30†

Draft v32.5

ID, sex, n doses
- ⬖ VAERS ID$^\boxtimes$
- ◇ Female
- ◇ Male
- ◇ Unknown (sex)
- ⬖ n doses (u = unk.)

Outcome
- ◆ Recovered
- ⬟ Not recovered
- ⬢ Died
- ● Unknown

n per manufacturer

Janssen	402
Moderna	2554
Novavax	5
Pfizer	7326
Unknown	82

Onset date‡

Date range	n IDs
07−08	3
05−06	7
03−04	18
2024, 01−02	28
11−12	55
09−10	49
07−08	47
05−06	58
03−04	120
2023, 01−02	146
11−12	224
09−10	228
07−08	248
05−06	291
03−04	417
2022, 01−02	764
11−12	951
09−10	809
07−08	922
05−06	1328
03−04	1114
2021, 01−02	530
2020, 11−12	18
Unknown	1994

Age = unknown‡‡

COVID-19	2016
All other	750

n symptoms

COVID-19	834
All other	397

Onset interval‡

n days	n IDs
≤3	2148
5	242
10	476
20	647
30	483
60	767
90	577
120	364
150	338
180	264
210	216
≥211	1141
Unk.	2706

	All COVID-19 2020.12.14−2024.08.30	All non-COVID-19 1990.07−2020.12.13
n VAERS IDs	10369	3509
μ, Mean‡‡	59.1	31.1
$\hat{x}$, Median‡‡	61.0	23.0
σ, Standard deviation‡‡	17.9	23.3
γ, Skewness‡‡	−0.4	0.7
n Hospitalized	4016	810
n Life threatening	2603	508
n Recovered	965	506
n Not recovered	6361	1269
n Died	1246	256

†Terms queried in SYMPT 1−5 include: astrocytoma, (glio-/retino-) blastoma, cancer, carcinoma, glioma, leukemia, lipoma, lymphoma, malignant (-germinoma/tumor), melanoma, meningioma, metastasis, myeloma, neoplasm, papilloma, sarcoma, & seminoma.‡Onset of symptoms post vaccine. n IDs are all CV19.

‡‡Natural language processing was used to extract age values from SYMPTOM TEXT and fill in missing data. Remaining reports with unknown age are neither plotted, nor included in calculations, but are included in subtotals. Symbols have a random adjustment within ⌣ ± 0.5 yr. $^\boxtimes$Symbols link to OpenVAERS.

*VAERS disclaimer (excerpts): "... VAERS is designed to rapidly detect unusual or unexpected patterns of adverse events, also referred to as 'safety signals'. If a possible safety signal is found ..., further analysis is performed with other safety systems, such as [CDC's VSD & CISA, or FDA BEST]."   vaers.hhs.gov