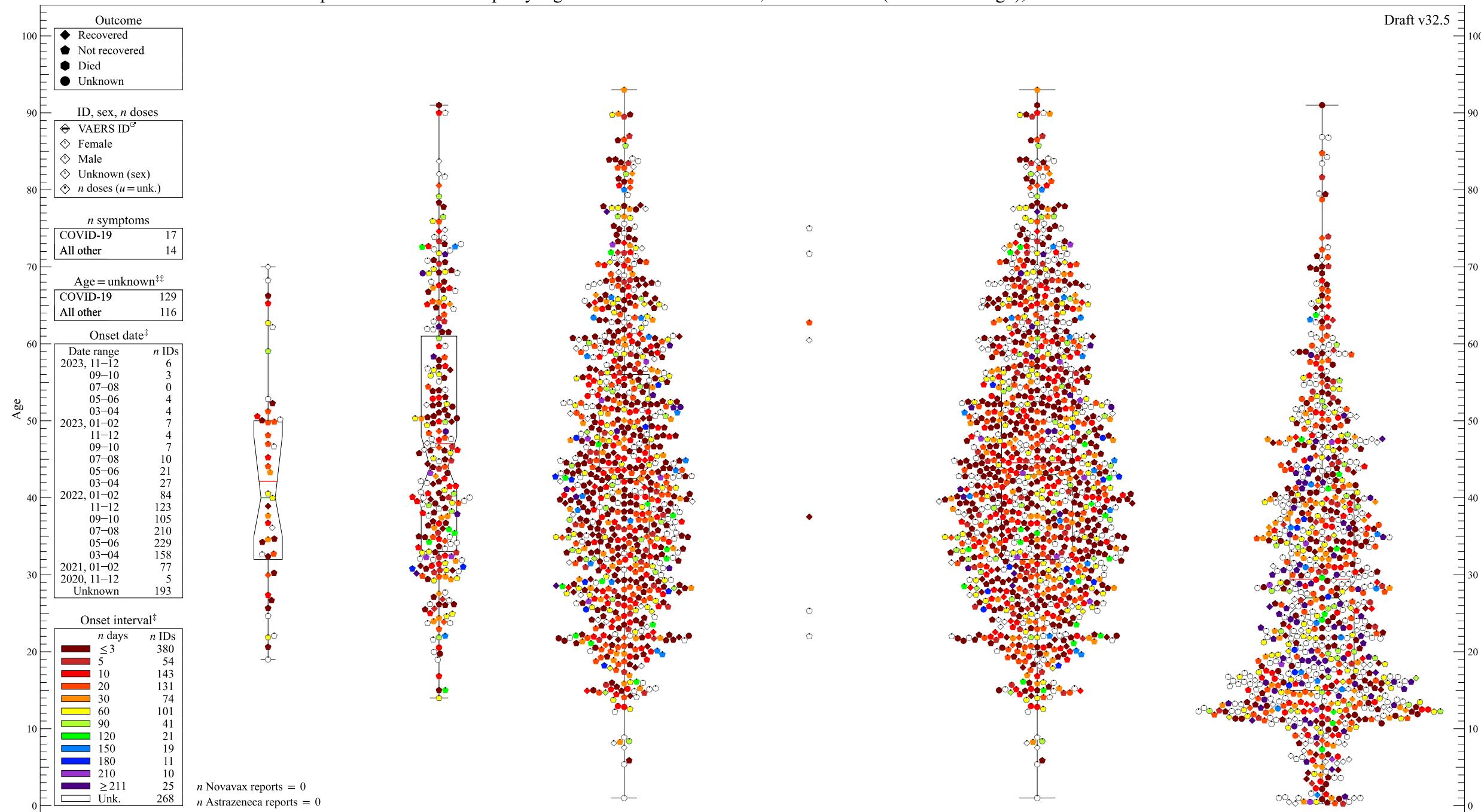


# Optic neuritis and neuropathy: age and vaccine distribution, VAERS data\* (U.S. and foreign), 1990.07–2024.08.30<sup>†</sup>

Draft v32.5



	Janssen COVID-19	Moderna COVID-19	Pfizer/BioNTech COVID-19	Unknown manufacturer COVID-19	All COVID-19 2020.12.14–2024.08.30	All non-COVID-19 1990.07–2020.12.13
n VAERS IDs	47	257	966	8	1278	992
$\mu$ , Mean <sup>‡‡</sup>	42.1	47.0	43.9	50.7	44.5	29.4
$\hat{x}$ , Median <sup>‡‡</sup>	40.0	44.0	42.5	60.0	43.0	27.0
$\sigma$ , Standard deviation <sup>‡‡</sup>	13.8	17.2	17.4	22.1	17.3	17.5
$\gamma$ , Skewness <sup>‡‡</sup>	0.3	0.4	0.3	-0.3	0.3	0.3
n Hospitalized	17	106	473	2	598	443
n Life threatening	1	8	21	1	31	29
n Recovered	4	26	98	2	130	163
n Not recovered	40	197	730	4	971	482
n Died	1	2	3	0	6	8

\*Terms queried in SYMPTOM fields 1–5 include: optic (atrophy, neuritis, neuropathy, papillitis, perineuritis), optic nerve (atrophy, compression, cupping, disorder, haemorrhage, infarction, injury), neuroretinitis, and retrobulbar neuritis.

<sup>†</sup>Onset of symptoms post vaccine. n IDs are all COVID-19.

<sup>‡</sup>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  $\sim \pm 0.5$  yr. <sup>‡‡</sup>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