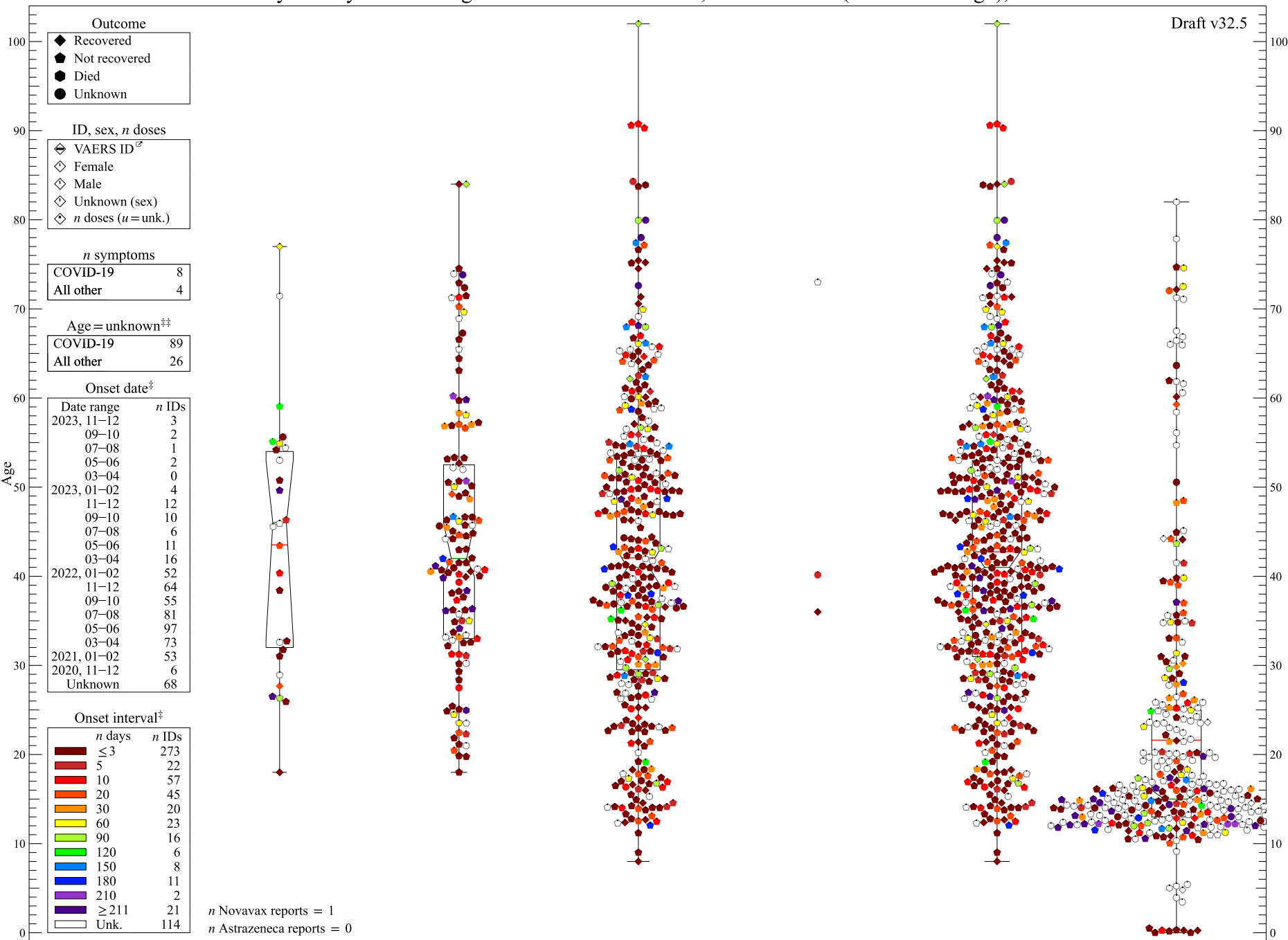


# Autonomic nervous system dysfunction: age and vaccine distribution, VAERS data\* (U.S. and foreign), 1990.07–2024.08.30<sup>†</sup>

Draft v32.5



*n* Novavax reports = 1  
*n* AstraZeneca reports = 0

	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
<i>n</i> VAERS IDs	31	130	453	3	618	351
$\mu$ , Mean <sup>**</sup> —	43.5	44.4	42.1	49.7	42.7	21.6
$\hat{x}$ , Median <sup>**</sup> —	46.0	42.0	41.0	40.0	41.0	15.0
$\sigma$ , Standard deviation <sup>**</sup>	14.5	15.1	17.5	20.3	16.8	15.6
$\gamma$ , Skewness <sup>**</sup>	0.3	0.5	0.3	1.7	0.3	0.3
<i>n</i> Hospitalized	11	44	152	2	209	154
<i>n</i> Life threatening	5	7	35	0	47	36
<i>n</i> Recovered	3	7	36	1	47	26
<i>n</i> Not recovered	24	104	352	1	482	188
<i>n</i> Died	2	1	3	0	6	15

<sup>†</sup>Terms queried in SYMPTOMS 1–5 include: autonomic (dysreflexia/nervous system imbalance/neuropathy/seizure), cardiac autonomic neuropathy, cardiovascular autonomic function test abnormal, & paroxysmal autonomic instability.  
<sup>\*\*</sup>NLP 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. <sup>Ⓔ</sup>Symbols link to OpenVAERS.  
<sup>\*</sup>VAERS disclaimer (excerpts): "... VAERS is designed to rapidly detect unusual or unexpected patterns of adverse events, also known as 'safety signals'." "The inclusion of events in VAERS data does not infer causality." vaers.hhs.gov