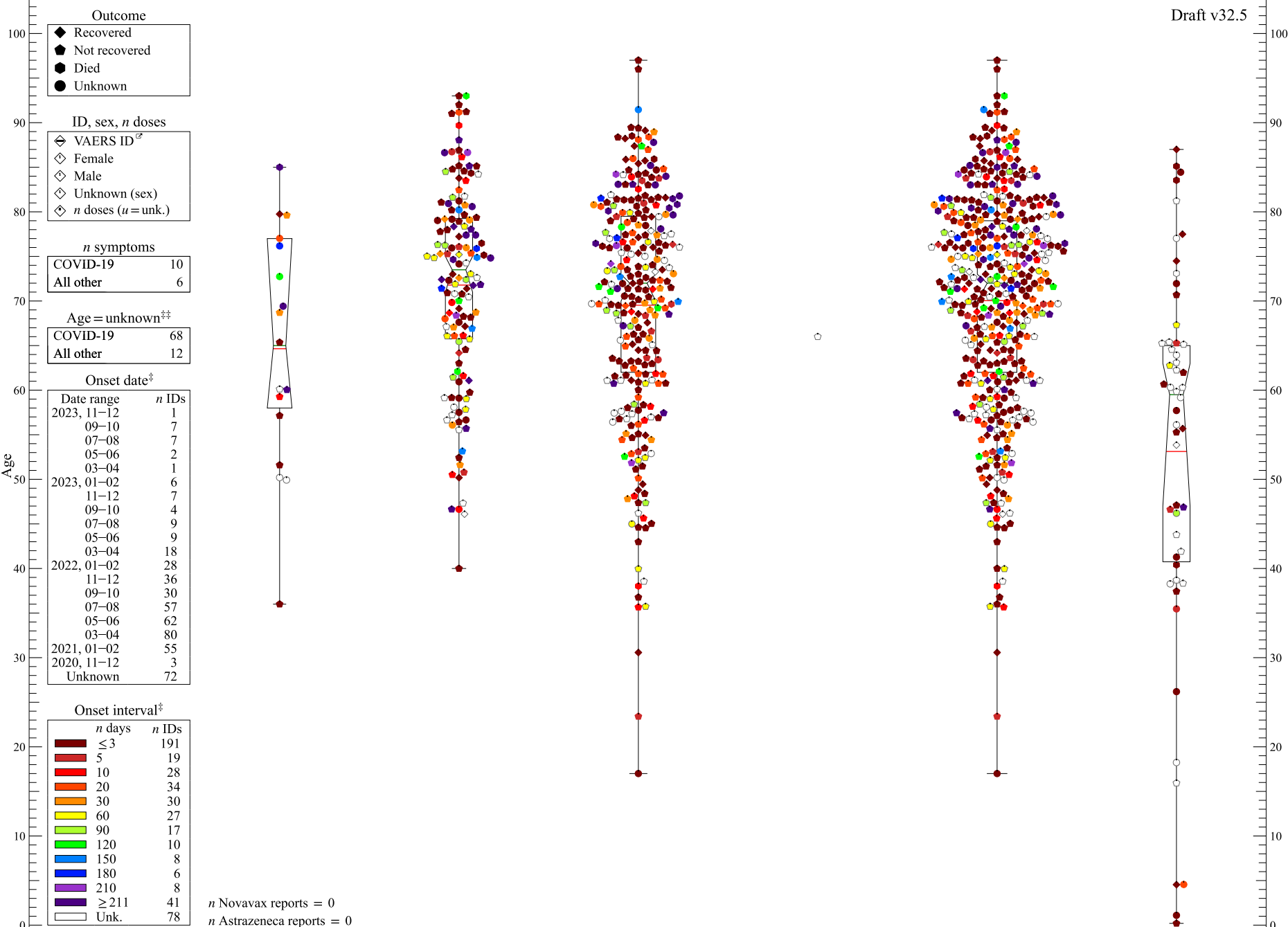


$\alpha$ -synucleinopathies (Parkinson's, dementia with Lewy bodies, MSA): age & vaccine distribution, VAERS data\* (U.S. & foreign), 1990.07–2024.08.30<sup>†</sup>

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	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	21	139	336	1	497	64
$\mu$ , Mean <sup>‡‡</sup> —	64.6	71.8	69.5	66.0	70.0	53.1
$\hat{x}$ , Median <sup>‡‡</sup> —	65.0	73.5	72.0	66.0	72.0	59.5
$\sigma$ , Standard deviation <sup>‡‡</sup>	13.4	11.5	13.1	—	12.7	22.0
$\gamma$ , Skewness <sup>‡‡</sup>	−0.4	−0.4	−0.8	—	−0.7	−0.7
n Hospitalized	4	38	110	1	153	11
n Life threatening	4	18	48	0	70	6
n Recovered	1	18	31	0	50	6
n Not recovered	13	89	233	1	336	30
n Died	3	13	27	0	43	4

<sup>†</sup>Terms queried in SYMPTOM 1–5 include: corticobasal degeneration, dementia with Lewy bodies, multiple system atrophy, Parkinson's (PD, plus), Parkinsonism (atypical), Parkinsonian (gait, tremor), & progressive supranuclear palsy.  
<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