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**Supplementary information**

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**Trends in COVID-19 therapeutic clinical trials**

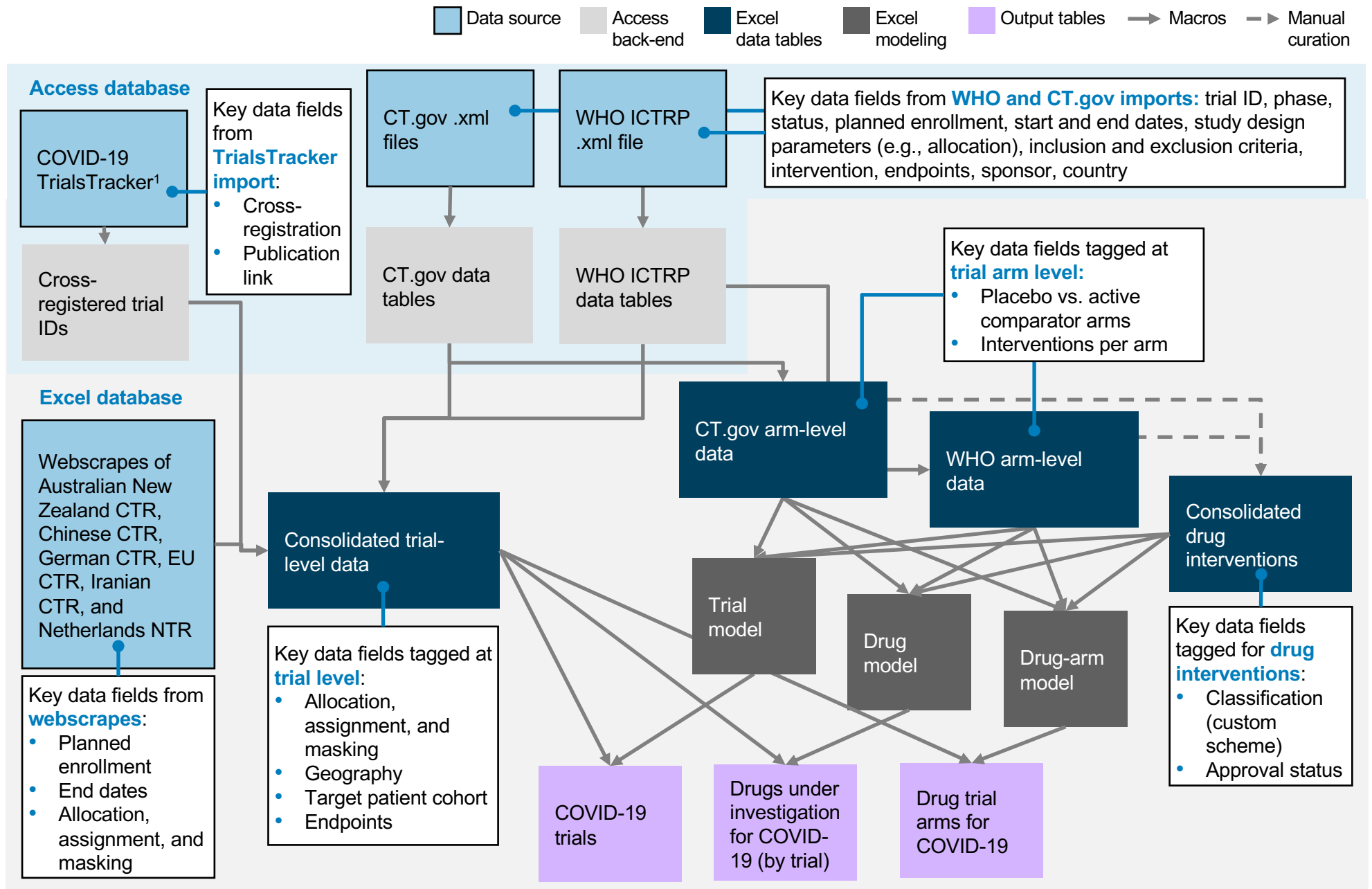
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In the format provided by the authors

<b>Description of data source</b>	
<b>ClinicalTrials.gov</b>	<ul style="list-style-type: none"> <li>• COVID-19 trial database includes “Listed clinical studies related to COVID-19” from CT.gov               <ul style="list-style-type: none"> <li>– Trials registered on CT.gov contain information not included in WHO ICTRP (e.g., number of study arms, sponsor type, etc.)</li> </ul> </li> </ul>
<b>WHO ICTRP</b>	<ul style="list-style-type: none"> <li>• COVID-19 trial database includes list of “COVID-19 trials” from WHO ICTRP               <ul style="list-style-type: none"> <li>– ICTRP registry incorporates trial records from multiple trial registries<sup>1</sup></li> <li>– ICTRP records include a subset of data fields available from these individual registries</li> </ul> </li> </ul>
<b>Additional trial registries</b>	<ul style="list-style-type: none"> <li>• To supplement information from the WHO ICTRP registry, additional information is incorporated via webscrapes from select registries:               <ul style="list-style-type: none"> <li>– Australian New Zealand CTR, Chinese CTR, German CTR (DRKS), EU CTR, Iranian CTR, and the Netherlands NTR</li> </ul> </li> </ul>

**Figure S1: The COVID-19 trial database incorporates data from CT.gov, WHO, and select additional clinical trial registries**

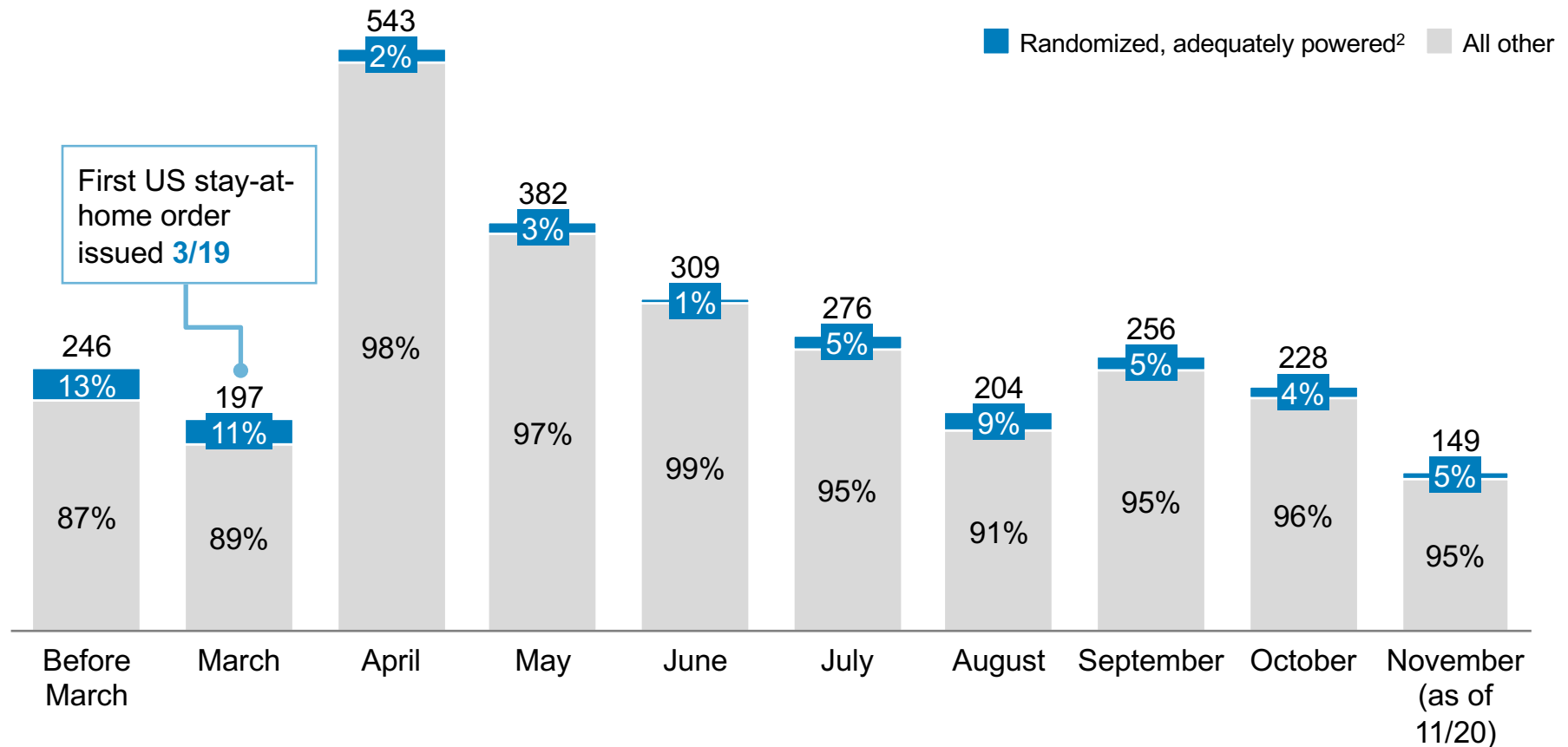
<sup>1</sup> ICTRP registry includes a subset of data fields from Australian New Zealand CTR, Chinese CTR, ClinicalTrials.gov, EU CTR, ISRCTN, Netherlands NTR, Brazilian CTR, Indian CTR, Korean CTR, Cuban CTR, German CTR, Iranian CTR, Japan CTR, Pan African CTR, Sri Lanka CTR, Thai CTR, and Peruvian CTR.



**Figure S2: Data model**

**Table S1: Summary of key data fields**

<b>Intervention</b>	<b>Trial design</b>	<b>Enrollment</b>	<b>Operations</b>	
<p><b>Intervention</b> Drug name Therapeutic class</p> <p><b>Study type</b> Observational Interventional (drug, non-drug)</p>	<p><b>Allocation</b> Randomized Non-randomized</p> <p><b>Assignment</b> Parallel assignment Factorial assignment Sequential assignment Single group assignment</p> <p><b>Masking</b> Blinded (single, double) Open label</p>	<p><b>Severity</b> Uninfected Exposed Infected without symptoms Mild Moderate Severe Critical Recovered</p> <p><b>Patient journey</b> Pre-exposure prophylaxis Post-exposure prophylaxis Asymptomatic Early mild Hospitalized LRI Ventilated ICU Recovered</p> <p><b>Endpoint (not exhaustive)</b> Mortality Clinical recovery Organ failure ICU utilization/status Hospitalization status</p> <p><b>Evidence generation</b> Link to publication</p>	<p><b>Phase</b> 0, 1, 1/2, 2, 2/3, 3, 4</p> <p><b>Status</b> Active e.g., recruiting etc. Cancelled e.g., withdrawn etc.</p> <p><b>Planned enrollment</b> Enrollment for trial Enrollment for each study arm</p> <p><b>Study dates</b> Start date Primary end date</p>	<p><b>Sponsor</b> Lead sponsor Sponsor type (Available only for CT.gov)</p> <p><b>Country</b> Lead country US involvement e.g., at least 1 trial site in the US</p> <p><b>Trial site</b> Number of trial sites</p>

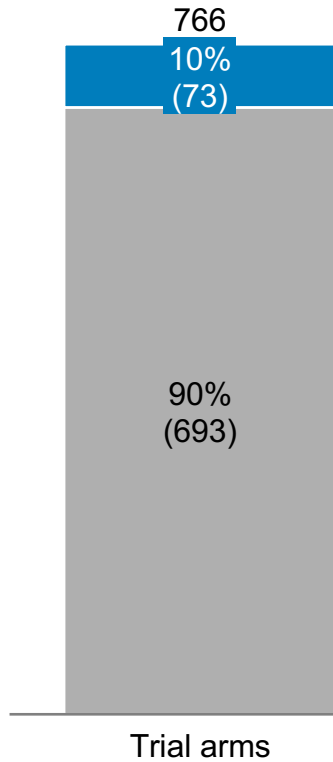


**Figure S3: The total number of trial arms<sup>1</sup> started and randomized, adequately powered per month**

1 Corresponds to number of global investigational trials recruiting or completed. Excludes trials that have been terminated (or equivalent). Separates out multi-arm trials into distinct counts, including arms testing the same intervention in different doses or durations. May not be fully comprehensive. Excludes Traditional Chinese Medicine and vaccine trials. Placebo arms are not included in arm counts.  
 2 Randomized, adequately powered trials are defined as randomized controlled trials in Phase 2 or beyond with expected enrollment of 250+ per arm for ventilated ICU, 500+ for hospitalized LRI, 1,000+ for early mild or asymptomatic, and 5,000+ for post-exposure prophylaxis (PEP) or pre-exposure prophylaxis (PrEP).

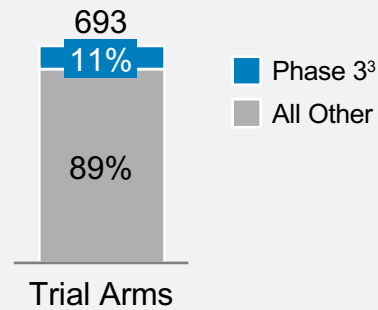
### Trial arms overview<sup>1</sup> (US)

- Randomized, adequately powered<sup>2</sup>
- All other

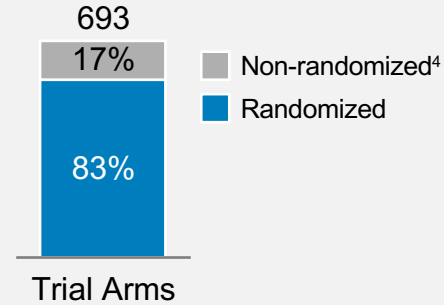


### 'All other' trial arms (US)

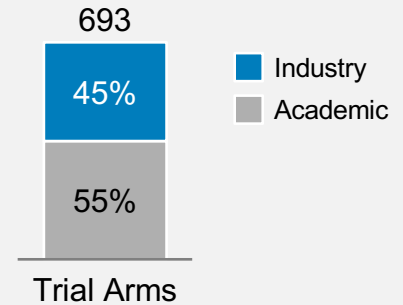
#### Phase breakdown



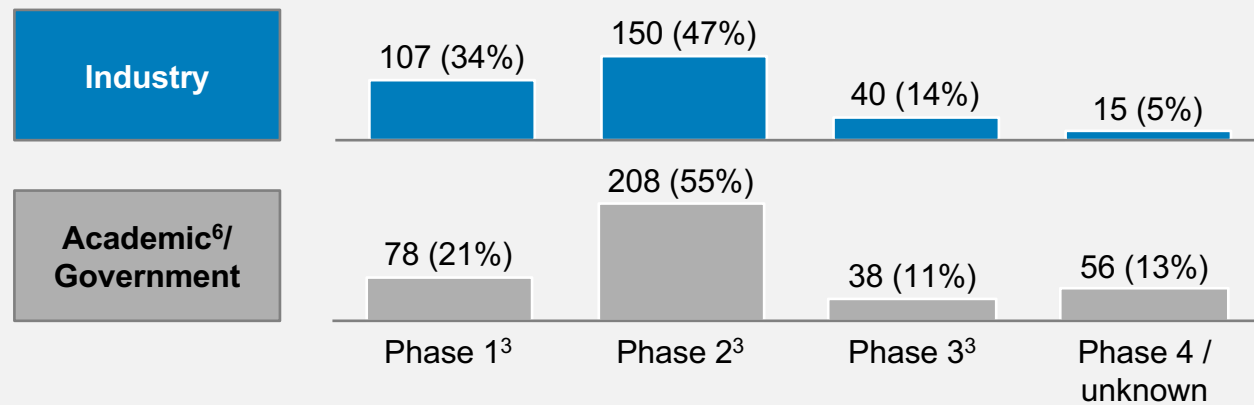
#### Randomization



#### Sponsor type<sup>5</sup>



#### Breakdown by sponsor type<sup>5</sup> and phase



**Figure S4: Characteristics of non- 'randomized, adequately powered' trial arms (US)**

1 Corresponds to number of global investigational trials recruiting or completed. Excludes trials that have been terminated (or equivalent). Separates out multi-arm trials into distinct counts, including arms testing the same intervention in different doses or durations. May not be fully comprehensive. Excludes Traditional Chinese Medicine and vaccine trials.

2 Randomized, adequately powered trials are defined as randomized controlled trials in Phase 2 or beyond with expected enrollment of 250+ per arm for ventilated ICU, 500+ for hospitalized LRI, 1,000+ for early mild or asymptomatic, and 5,000+ for post-exposure prophylaxis (PEP) or pre-exposure prophylaxis (PrEP).

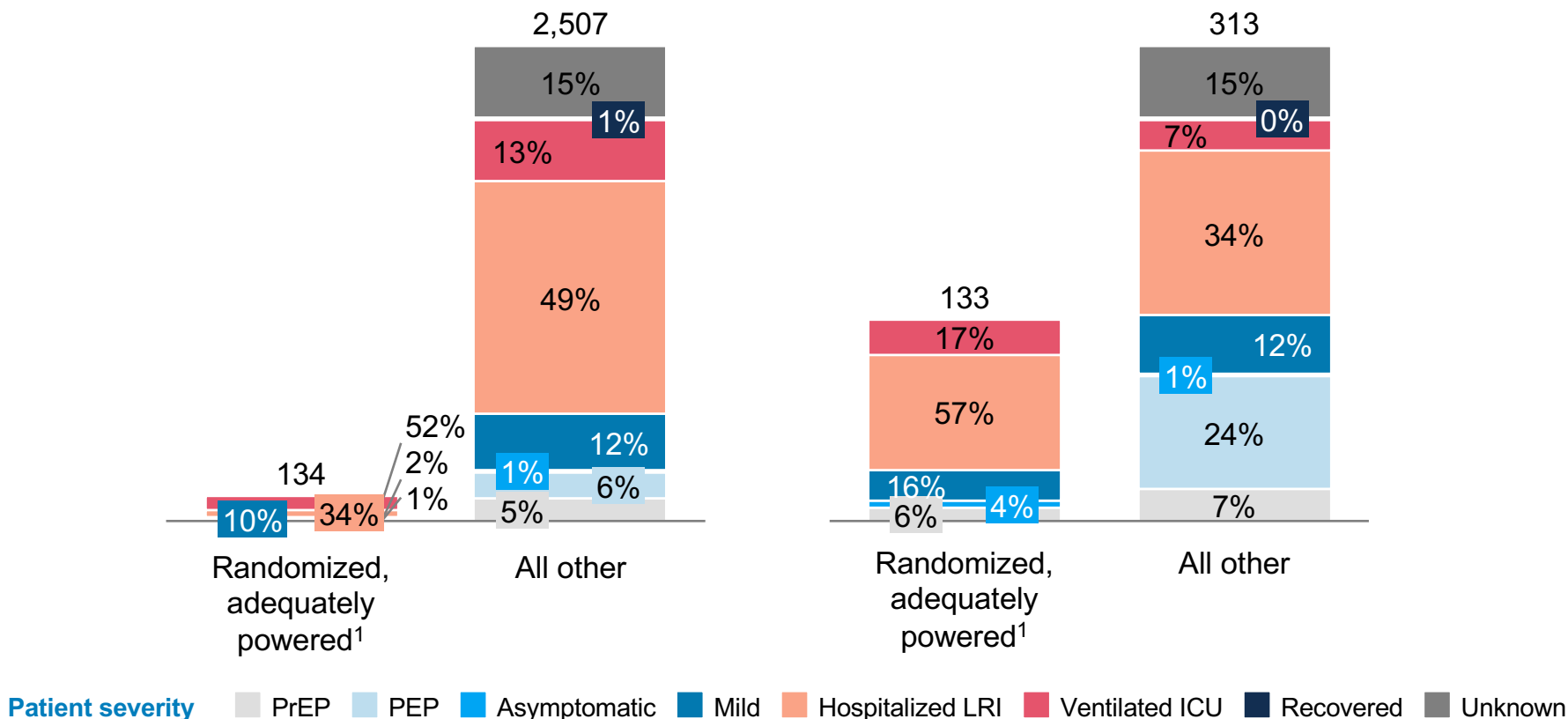
3 Multi-phase trials grouped with earliest phase involved: Ph 1/2 trials grouped with Ph 1 trials, Ph 2/3 trials grouped with Ph 2 trials, Ph 3/4 trials grouped with Ph 3 trials.

4 Includes trials with unknown randomization design.

5 If multiple sponsors are involved, trial is categorized by lead sponsor type.

**Global trial arms<sup>2</sup> with start dates before November 2020, # trial arms**

**Planned enrollment<sup>3</sup> for global trial arms with start dates before November 2020, # patients, K**



**Figure S5: Randomized, adequately powered trial arms<sup>1</sup> and target patient enrollment for trials started before November 2020**

1 Randomized, adequately powered trials are defined as randomized controlled trials in Phase 2 or beyond with expected enrollment of 250+ per arm for ventilated ICU, 500+ for hospitalized LRI, 1,000+ for early mild or asymptomatic, and 5,000+ for post-exposure prophylaxis (PEP) or pre-exposure prophylaxis (PrEP).

2 Corresponds to number of global investigational trials recruiting or completed. Excludes trials that have been terminated (or equivalent). Separates out multi-arm trials into distinct counts, including arms testing the same intervention in different doses or durations. May not be fully comprehensive. Excludes Traditional Chinese Medicine and vaccine trials.

3 Planned enrollment defined as enrollment per arm estimated from total enrollment by assuming even distribution of patients across all arms. It is not reflective of actual enrollment. Total planned enrollment does not include planned enrollment in placebo arms.