Notes re. success rates shown in Fig. 1 and 2

- Rates for the first 3 bars (all mAbs, non-cancer only, cancer only) were published in ‘Antibodies to watch in 2019’ and are based on historical data for mAbs that entered clinical study during 10-year periods [2000-09 (Fig. 1), 2005-2014 (Fig. 2)].
  - Success was defined as a US or EU approval.
  - Only mAbs sponsored by commercial firms at some point in their development were included in the dataset.
  - The paper can be found at www.tandfonline.com/doi/full/10.1080/19420862.2018.1556465
- Due to the small number of anti-infective mAbs, rates for these molecules were calculated based on those that entered clinical study during a 20-year period (2000-2019).
  - Success was defined as an approval in any country, since some products (e.g., anti-rabies antibodies) may not have been intended for the US/EU market.
  - Only commercially sponsored mAbs were included; anti-infective mAbs currently comprise only 5% of the commercial pipeline (35 of 690 mAbs in clinical study).
- For the anti-infective mAbs, the regulatory review to approval rate is unusually low due to the failure of 2 mAbs in regulatory review in the early 2000s. These are presumably irrelevant now. Assuming RR to approval transition rate is 100%, then the Phase 1 to approval rate for anti-infective mAbs is 30%.
  - There are currently over 40 anti-SARS-CoV-2 antibody programs in discovery/preclinical development. If all result in 1 antibody that transitions to Phase 1, then the number of such antibodies that might be approved is 18 (60 antibodies x 0.3).

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Figure 1

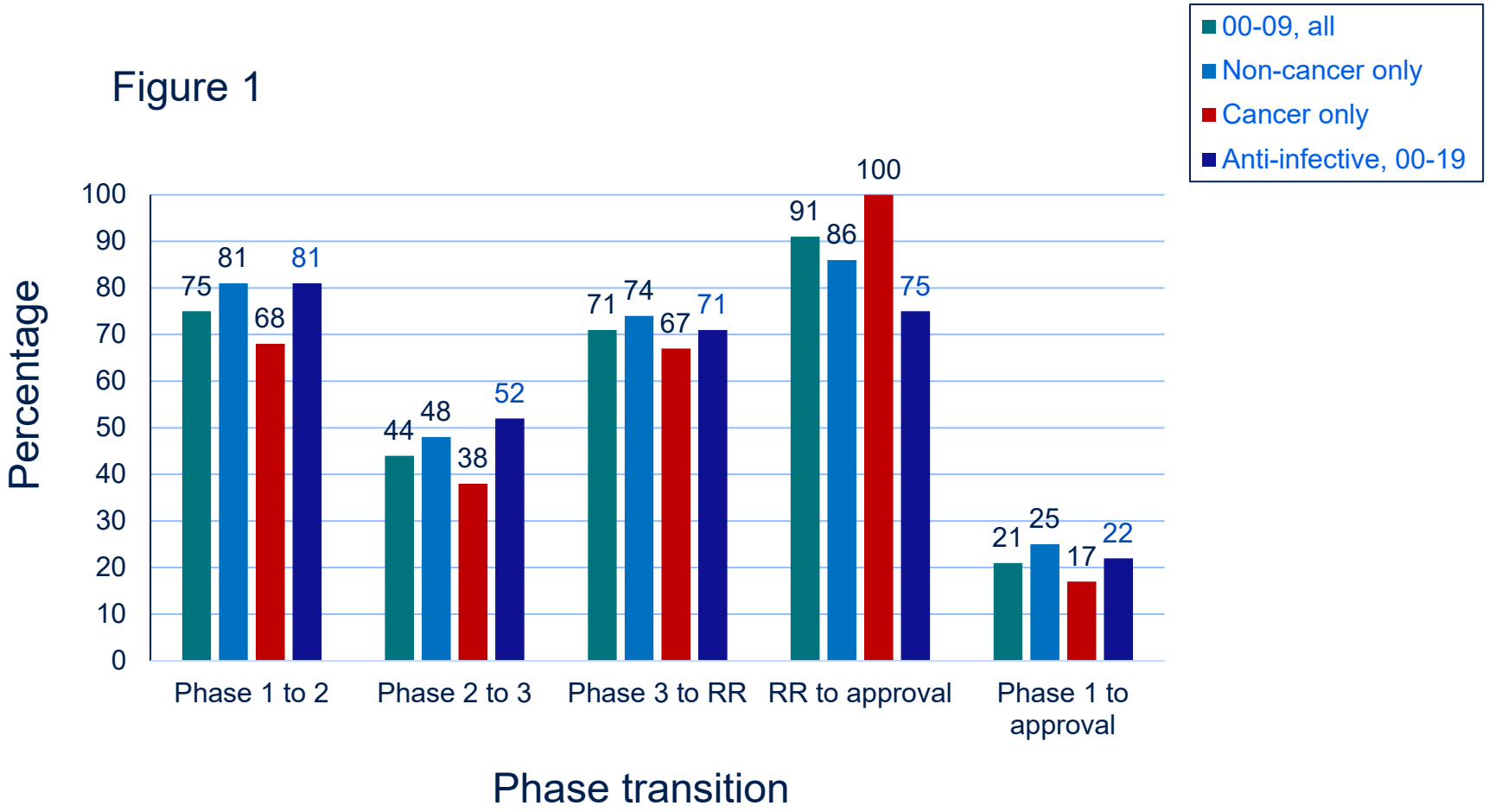

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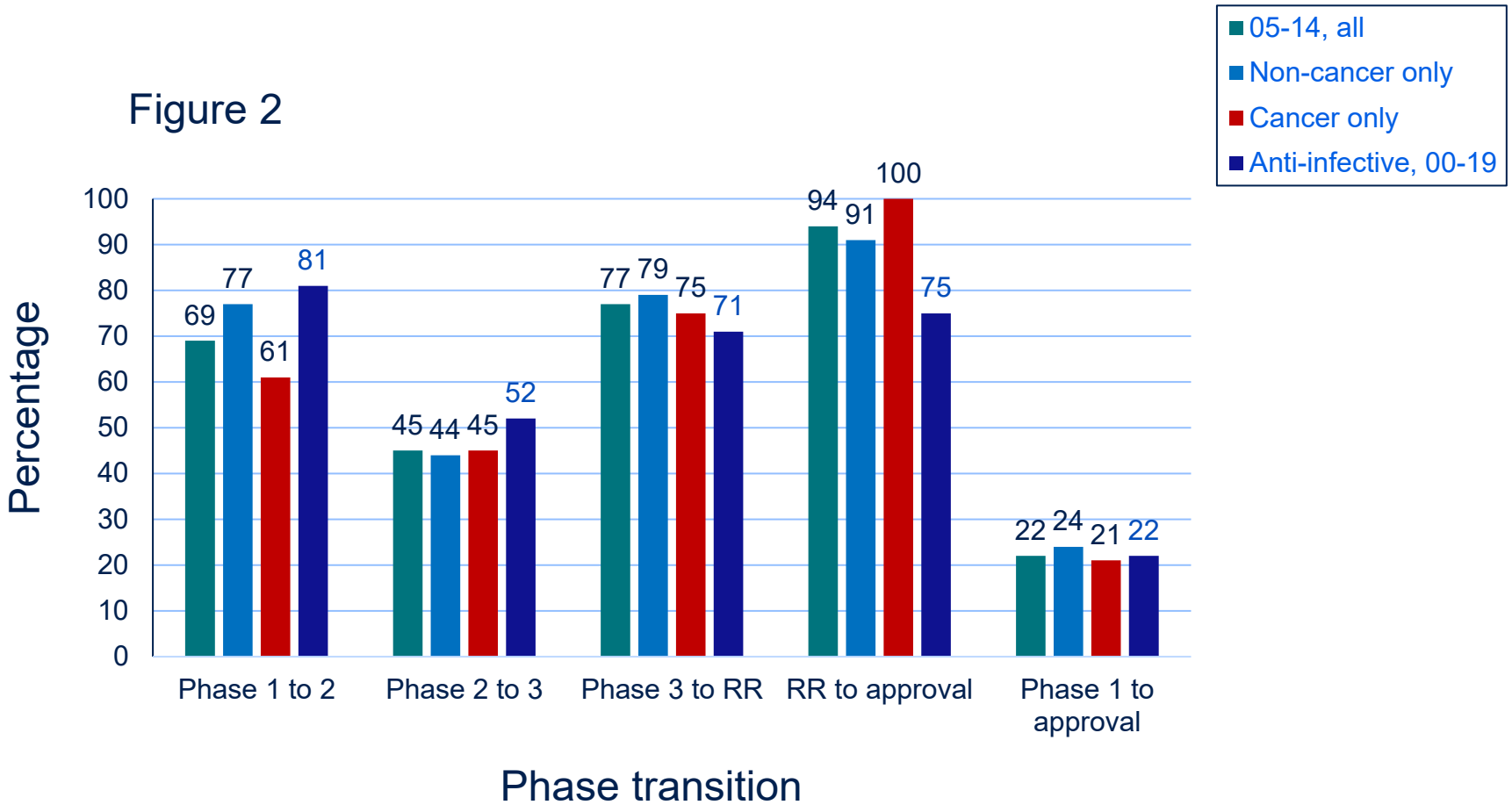
Figure 2



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