**Supplementary information: File Information**

**Supplementary Information**

This file contains a more detailed description of Swarm Learning and the scenarios that were used for evaluation, as well as a Supplementary Discussion.

**Reporting Summary**

**Peer Review File**

**Supplementary Table 1**

Overview over all sample numbers and scenarios.

**Supplementary Table 2**

Dataset annotations of datasets A-E.

**Supplementary Table 3**

Prediction results for all scenarios and permutations.

**Supplementary Table 4**

Summary statistics on all prediction scenarios.

**Supplementary Table 5**

Statistical tests comparing single node vs. Swarm predictions.

**Supplementary Table 6**

COVID-19 Patient characteristics.

**Supplementary Table 7**

Library preparation and sequencing details of studies included in Extended Data Figure 4i.

**Supplementary Table 8**

List of all tuning parameters used for all scenarios.