

## Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Complete metadata per participant, information about the samples and time points collected for each of the omics datasets.

File Name: Supplementary Data 2

Description: DGE results, all contrasts, next-gen RNA sequencing, stage 1. Differential expression analysis was performed using a two-sided moderate t-test.

File Name: Supplementary Data 3

Description: DGE results, all contrasts, next-gen RNA sequencing, stage 2. Differential expression analysis was performed using a two-sided moderate t-test.

File Name: Supplementary Data 4

Description: DGE results, all contrasts, next-gen RNA sequencing, stage 2. Differential expression analysis was performed using a two-sided moderate t-test.

File Name: Supplementary Data 5

Description: DGE results, all contrasts, small RNA sequencing. Differential expression analysis was performed using a two-sided moderate t-test.

File Name: Supplementary Data 6

Description: DGE results, all contrasts, small RNA sequencing. Differential expression analysis was performed using a two-sided moderate t-test.

File Name: Supplementary Data 7

Description: MIEAA2 GO BP results tables, small RNA sequencing, stage 1. Significance testing obtained via MIEAA2 which uses a two-sided GSEA analysis approach.

File Name: Supplementary Data 8

Description: MIEAA2 GO BP results tables, small RNA sequencing, stage 2. Significance testing obtained via MIEAA2 which uses a two-sided GSEA analysis approach.