

Supplementary Data 1: “Cluster markers of mpeg:GFP cells from the integrated macrophage time course dataset”. This spreadsheet contains the differentially expressed gene list (cluster markers) of mpeg:GFP cells from the integrated macrophage time course dataset generated with Seurat::FindAllMarkers() with default parameters. Genes with p-values greater than 0.05 were omitted from the gene list. Each tab represents one cluster.

Supplementary Data 2: “Differentially expressed genes for each time point for the effector macrophages population”. Each tab represents the Differentially Expressed genes shared by the three effector clusters based on the Venn Diagram. Tabs are separated by time point and up- or downregulated genes. Each tab contains a GO and pathway enrichment analysis using Metascape.

Supplementary Data 3:

Title “Cluster markers of mpeg:GFP cells from the integrated il10ra mutant macrophage time course dataset”. This spreadsheet contains the differentially expressed gene list (cluster markers) of mpeg:GFP cell from the integrated il10ra mutant macrophage time course dataset generated with Seurat::FindAllMarkers() with default parameters. Genes with p-values greater than 0.05 were omitted from the gene list. Each tab represents one cluster.

Supplementary Movie 1. 3D animation of a whole 5dpf larva, related to Figure 1a. Macrophages (*mpeg:GFP*) are labelled in cyan and neuromasts (*she:lckmScarletI*) in red.

Supplementary Movie 2. Effector macrophages rapidly phagocytose dying HCs upon addition of neomycin. Maximum projection (z-stack of 30 μ m) of a time-lapse recording of macrophages (blue, *mpeg:GFP*) and HCs (red, *myo6:lckmScarletI*). One image is taken every minute for two hours.

Supplementary Movie 3. Zoom of macrophages phagocytosing HCs from Supplementary Movie 2

Supplementary Movie 4. Dynamics of macrophages during 7H after neomycin treatment related to Figure 1b. Maximum projection (z-stack of 30 μ m) of a time lapse recording of macrophages (cyan, *mpeg:GFP*) and neuromasts (red, *she:lckmScarletI*). One image is taken every five minutes for seven hours.

Supplementary Movie 5. Effector macrophages are located close to the neuromasts, and all macrophages increase their velocity upon neomycin treatment. Maximum projection (z-stack of 90 μ m) of a time lapse recording of macrophages (cyan, *mpeg:GFP*) and neuromasts (red, *she:lckmScarletI*) in the trunk region of 5dpf larvae. One image is taken every minute for two hours.