

**Supplemental Figure S2** Illustration of instance segmentation using the developed Mask-RCNN model. **(A)** Each nucleus has a bounding box (dashed lines). Nucleus segmentation is made within this bounding box. The class of the nucleus is also predicted at the same time as the segmentation, and the nuclei class is labeled on the top left of its bound box. (T: tumor nuclei; S: stromal nuclei; L: lymphocyte nuclei; R: red blood cell; M: macrophage nuclei and K: karyorrhexis) **(B)** Original image patch (500 × 500 pixels). **(C)** For better viewing, the nuclei are colored according to their categories.

