**Supplementary Methods**

**Immunohistochemistry, Immunofluorescence and Image analysis**

Immunohistochemistry of formalin-fixed, paraffin-embedded sections for podoplanin was performed on the Leica BOND-Max automated IHC platform (Leica Microsystems Inc, Wetzlar, Germany). Sections were incubated with monoclonal podoplanin antibody (18H5, diluted 1:1500 from Abcam, Cambridge, UK), and antigen binding detected using the Leica BOND refine polymer detection kit, DS9800. For immunohistochemistry of pan-cytokeratin, frozen sections were fixed in acetone and incubated with HRP-conjugated monoclonal pan-cytokeratin antibody (C11, diluted 1:500 from Santa Cruz Biotechnology, Santa Cruz, USA). Antigen binding was detected using ImmPACT DAB peroxidase substrate (Vector Labs, Burlingame, USA). Stained sections were photographed using a Hamamatsu NanoZoomer-XR C12000 digital slide scanner (Hamamatsu Photonics; Japan) and staining areas were quantified using its integrated software.

For immunostaining of RANKL, cells were fixed (4% paraformaldehyde, 10 min), permeabilized (0.25% TritonX-100, 12 min at RT), blocked (1% BSA, 30 min) and incubated with the primary antibodies diluted in blocking solutions (see Table S2), followed by several washes with PBS and incubation with an suitable fluorescently conjugated secondary antibodies.

**Time-lapse microscopy and image analysis**

To measure the NKp46-ILC3 clustering around stromal cells, series of image processing functions in ImageJ were performed to measure the area of the frame occupied by the cells. AVI videos were recorded in an RGB format and then converted to 8-bit grey-scale. Each frame of the video was treated independently and a 2-D rolling ball algorithm (aka grey-scale morphology) was run using the "Subtract Background" function with a ball radius of 10 pixels to remove interfering background variations. The Otsu algorithm ("Auto Threshold", "method = Otsu white"), was used to segment the foreground cells from the background by thresholding. On the resulting binary image the "Measure" function reports the average image intensity. This value divided by 255 equals the area proportion of foreground in the frame, for a binary image, and this was used to quantify the clustering. This algorithm has been implemented as an ImageJ macro running in batch mode, with a processing time of about 7 min for one 300-frame video. The macro is available from (<http://users.ox.ac.uk/~atdgroup/software/ForegroundArea_batch.ijm>**).**

**ELISA**

Tumors were snap frozen and lysed by homogenisation in 100mM Tris pH 7.5, 150mM NaCl, 1mM EGTA, 1mM EDTA, 1% (v/v) Triton-X-100 and 0.5% (w/v) sodium deoxycholate. ELISAs were performed using commercially available DuoSet kits (R&D Systems, Minneapolis, USA).