## **Supplement**

Thu Thuy, N. ., Van Hung, N. ., Van Chu, N. ., Phong Thu, L. ., & Trung Tho, L. . (2025). Relationship of transgelin expression with clinicopathological characteristics and disease-free survival in HER2-positive breast cancer. *Biomedical Research and Therapy*, 12(8), 7697-7707. https://doi.org/10.15419/55xvxh21

## Hematoxylin and eosin staining

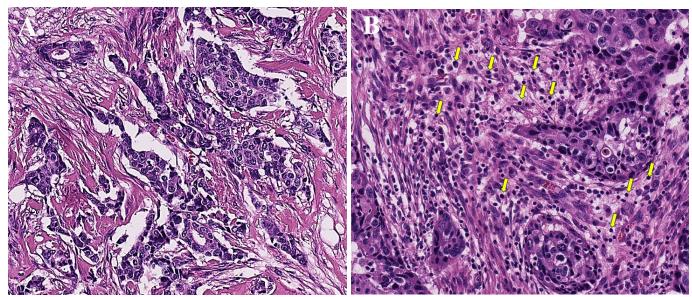
The paraffin-embedded tissue specimens were cut into 5-µm serial sections. The sections were dewaxed and rehydrated with xylene and ethanol, respectively, followed by staining with Hematoxylin for 5 min and 1% acid ethanol for 3 seconds. The sections were then rinsed in distilled water and stained with eosin for 3 min. Dehydration and hyalinization were then subsequently performed. Sections were visualized using a light microscope (Olympus, Tokyo, Japan).

## Immunohistochemical staining

Formalin-fixed, paraffin-embedded tissue sections were stained with an automatic immunohistochemical staining device (Ventana BenchMark ULTRA autostainer) as follows:

- 1. Tissue sections were cut at 3–5 μm thickness and mounted on positively charged slides.
- 2. The computer and the automated immunohistochemical staining machine were started.
- 3. The pre-installed general staining program was initiated.
- 4. The specific processing and immunohistochemical staining protocol was configured on the machine.
- 5. The primary antibody to be used was selected.
- 6. Paraffin was removed using Ezpred solution (a reagent specifically designed for the machine).
- 7. Antigen retrieval was performed using CC1 solution at 95°C for 30 minutes. Slides were incubated with primary antibodies against Transgelin (Scytek, RA0451-C.1) ) at a dilution of 1:100 and CD8 (Diagnostic Biosystems, Mob117) at a dilution of 1:200 according to the manufacturer's instructions.
  - 8. Immunoreactivity was visualized using a Diamino Benzidine (DAB) detection kit.
  - 9. After the staining process was completed, the slides were removed and washed with

- a detergent solution to eliminate the LCS oil layer.
- 10. Nuclear counterstaining was performed with hematoxylin.
- 11. Coverslips were applied.
  Slides were examined under a light microscope.



Supplementary Figure: Tumor-infiltrating lymphocytes in HER2-positive breast cancer. Staining Hematoxylin and eosin in original magnification 20x: Low (A) and high (B).