

Open Peer Review on Qeios

Trastuzumab/Hyaluronidase-oysk

National Cancer Institute

Source

National Cancer Institute. <u>Trastuzumab/Hyaluronidase-oysk</u>. NCI Thesaurus. Code C158060.

A ready-to-use combination of trastuzumab, a recombinant humanized monoclonal antibody directed against the human epidermal growth factor receptor 2 (HER2; receptor tyrosine-protein kinase erbB-2), and hyaluronidase-oysk, a recombinant human hyaluronidase PH20 (rHuPH20), that may be used for the treatment of HER2-overexpressing breast cancers. Upon subcutaneous administration, hyaluronidase-oysk temporarily breaks down the hyaluronan barrier, which decreases viscosity of, and allows trastuzumab to spread rapidly through the interstitial space. This improves access to lymphatic and capillary vessels and facilitates the absorption of trastuzumab into the bloodstream. Trastuzumab binds to the extracellular ligand-binding domain of HER2 and mediates the activation of an antibody-dependent cell-mediated cytotoxicity (ADCC) against HER2-expressing tumor cells. HER2 is overexpressed in many adenocarcinomas, particularly breast adenocarcinomas.