

Identification of leading substances for the treatment of esophageal cancer and breast cancer based on PTK7-neutralizing humanized antibodies

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ONCOLOGY	Lead
Product Type	Immunoglobulin Product [Humanized Antibody]
Indication	1st indication: Esophageal Squamous Cell Carcinoma [ESCC], Esophageal Squamous Cell Carcinoma [MeSH term] 2nd indication: Triple-Negative Breast Cancer [TNBC], Triple Negative Breast neoplasms [MeSH term]
Target	Protein Tyrosine Kinase 7 [PTK7]
MOA (Mechanism of Action)	<ul style="list-style-type: none"> • PTK7 is a catalytically defective receptor tyrosine kinase (RTK) and oncogenic by interacting with and activating catalytically active RTKs. • PTK7-neutralizing antibody inhibits the oncogenic function of PTK7 by preventing activation of catalytically active RTKs.
Competitiveness	<ul style="list-style-type: none"> • The PTK7-neutralizing humanized antibody blocks the function only where PTK7 acts and does not use drugs with potential side effects, thus has the advantage of ensuring safety while maintaining target specificity. • It has the potential to be developed as a first-in-class drug.
Development Stage	Lead generation from PTK7-neutralizing mouse antibody to PTK7-neutralizing humanized antibody
Route of Administration	Parenteral-Intravenous or Intraperitoneal