#HERTimeMatters

Fighting breast cancer with innovation and hope

The goal of innovation is to make life easier and better. **PHESGO** is aiming to do just that with the treatment of HER2+ve breast cancer. We know that India has the **third-largest number of breast cancer cases** amongst women in the world, but here's **what we don't know:**

HER2+ve breast cancer: the more dreaded subtype

Around **20% of all breast cancers are HER2+ve.** It is considered to be more aggressive because:

- Disease recurrence
- Early metastasis
- Shortened survival
- Rapid tumour development
- High nuclear grade

Barriers to accessing cancer care

- Ratio of oncologists to patients is 1:2000
- Only 1,000 trained oncologists
- Only 62 dedicated cancer care centres in India
- Lack of diagnostic facilities, leads to cancer being screened in later stages, negatively impacting treatment outcomes.
- Distance is a major barrier. Patients have to travel for days and cover hundreds of miles to access the nearest cancer care facility.
- Current treatment options of IV infusions are long, often requiring an entire day, complex, inconvenient and painful.

Let's go PHESGO!

Roche's commitment to revolutionize breast cancer care in India

PHESGO is the **world's first, fixed dose, subcutaneous (SC) formulation in Oncology,** combining **two blockbuster monoclonal antibodies** - Perjeta (pertuzumab) and Herceptin (trastuzumab) — to treat HER2+ve breast cancer. PHESGO is a SC injection that is **administered over minutes compared to hours,** giving patients & caregivers the gift of time.

The 3 components of PHESGO

- *Perjeta® (pertuzumab)*
- *Herceptin® (trastuzumab)*
- *Hyaluronidase*

Turning hours of treatment into minutes! Here's how!

It is made possible using hyaluronidase, a protein naturally found in most tissues of the body. It helps enhance the way the body absorbs medicines that are injected under the skin. When PHESGO is injected, the hyaluronidase makes the tissue under the skin temporarily more absorbent so that it's able to receive the medication. Once it is absorbed by one's body, the Perjeta and Herceptin inside PHESGO work the same way to treat HER2+ breast cancer.

P = PERJETA
H = HERCEPTIN
ES = EASY
GO = GO!

PHESGO is changing lives of breast cancer patients

Reduces patient chair time by upto 90%

20%

Time tested efficacy of two Mabs at 20% lesser cost

Since their launches,

Herceptin® trastuzumab Precision • Power • Promise has treated **35 lakh** people

PERJETA® pertuzumab has treated **6.5 lakh** people globally

PHESGO has treated **17,000 patients**

PHESGO is approved in over 73 countries for treating eBC and mBC

PHESGO: amazing facts

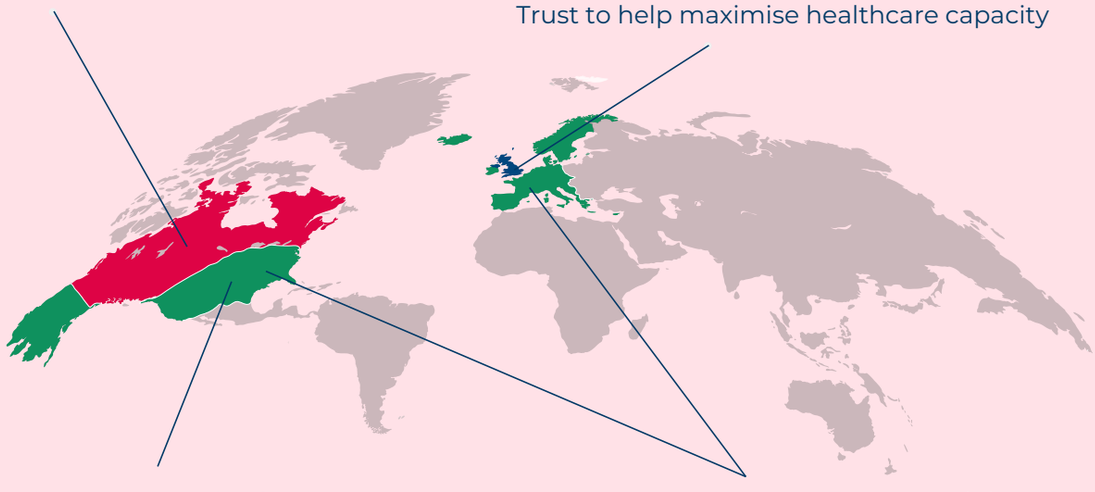
- ✔ More than 5 global manufacturing sites work in collaboration to make PHESGO available
- ✔ To produce a final vial of PHESGO, materials travel nearly 22,000 km to reach the final step in the manufacturing process, located in Kaiseraugst, Switzerland.
- ✔ It takes more than 6 months to produce a single monoclonal antibody (Mab) and PHESGO combines two different Mabs into one vial!
- ✔ PHESGO's preference, efficacy and safety profile was studied across two landmark clinical studies:
  - **FeDeriCa study** showed high and almost identical PCR (Pathological Complete Response) rates with PHESGO compared with Perjeta + Herceptin IV and a comparable safety profile.
  - The **phase 2 PHranceSCa study** found that 85% of patients preferred PHESGO to IV administration due to less time in clinic and a more comfortable route.

Proven global success of PHESGO in providing cost efficiency in healthcare ecosystems

Based on Roche, compared to current standard of care, PHESGO reduces cost to society. Here are some global examples.

Generates cost savings for the healthcare system compared to IV treatment of the same medicines, through reduced preparation and administration costs

Achieved NHS reimbursement in April 2021, where it is now being offered as an 'at home' treatment in one of Europe's largest cancer treatment centres, the Christie NHS Foundation Trust to help maximise healthcare capacity



An expanded access study of at-home Phesgo administration during the COVID-19 pandemic has begun in the US to enable continuity of care by a home health nurse

Western Europe and the US: Provides a reduction of up to 75-80% of non-drug costs

Savings of up to **85%** on chair time costs

76% savings on active HCPs' time costs

65% reduction of patients' productivity losses

Cost savings indicated above in home use settings are dependent on local guidelines and label. In India, PHESGO will be sold on the prescription of a "Registered Oncologist Only". Usage under home administration is not approved.

PHESGO: a win-win for all stakeholders

Patients

- 92% reduction in treatment time compared to IV infusions
- 85% of patients prefer PHESGO vs IV
- Faster administration means less time in the hospital
- Subcutaneous administration means greater convenience, less invasive

HCP

- Non-inferior pharmacokinetics profile and consistent safety profile
- Faster administration means shorter appoinments, freeing up time to treat more patients

Hospital administrations

- Shorter treatment time means improved patient flow, shorter waiting time and better patient experience
- Greater staff productivity, less wastage and more storage space
- Cost saving benefits to healthcare systems

Paramedics

- Ready-to-use fixed does formulation removes the need for IV preparation and checking by HCPs
- Reduces complexities and No risk for dosage errors
- Lower preparation time vs IV

Doing now what patients need next

References:

- Sripada K, et al. Subcutaneous fixed-dose combination of pertuzumab and trastuzumab for the treatment of metastatic breast cancer in Canada - a budget impact analysis. Presented at SABCS; 2020 Dec 08-11; San Antonio Texas. Abstract #PS9-55.
- Roche data on file.
- Manevy F, et al. Potential non-drug cost differences associated with the use of the fixed-dose combination of pertuzumab and trastuzumab for subcutaneous injection (PH FDC SC) in the treatment of HER2-positive early breast cancer patients in Western Europe and the United States. Presented at ASCO; 2021 June 04-08. Abstract #544.
- https://www.business-standard.com/article/current-affairs/india-has-1-8-mn-cancer-patients-but-only-one-oncologist-to-treat-every-2-000-114052401140_1.html
- https://ascopubs.org/doi/abs/10.1200/jgo.18.76900
- The Christie NHS Trust. New cancer treatments offered at home from one of Europe's largest cancer centres. [Internet; cited August 2021]. Available from: https://www.christie.nhs.uk/about-us/news-at-the-christie/latest-news-stories/new-cancer-treatments-offered-at-home-from-one-of-europe-s-largest-cancer-centres.

WARNING: To be sold by retail on the prescription of a "Registered Oncologist Only"
ABRIDGED PRESCRIBING INFORMATION
(Phesgo ®) SUMMARY OF PRESCRIBING INFORMATION:
Generic Name: Pertuzumab-Trastuzumab Injection
Brand Name: Phesgo ®
Composition: *Active ingredient(s):* Pertuzumab, Trastuzumab. Phesgo is a clear to opalescent solution, colourless to slightly brownish solution supplied in sterile, preservative-free, non-pyrogenic single-dose vials. Single dose vials contain:1200 mg pertuzumab/600 mg trastuzumab/15 mL solution in a 20 cc vial 600 mg pertuzumab/600 mg trastuzumab/10 mL solution in a 15 cc vial *Excipients:* rHuPH20, L-Histidine, L-Histidine Hydrochloride Monohydrate, α,α-Trehalose Dihydrate, Sucrose, Polysorbate 20, L-Methionine, Water for Injection. Phesgo contains vorhyaluronidase alfa (recombinant human hyaluronidase rHuPH20), an enzyme used to increase the dispersion and absorption of co-formulated drugs when administered subcutaneously. **Indications: 1. Early Breast Cancer (EBC)** Phesgo is indicated for use in combination with chemotherapy for: • The neoadjuvant treatment of adult patients with HER2-positive, locally advanced, inflammatory, or early stage breast cancer (either greater than 2 cm in diameter or node positive) as part of a complete treatment regimen for early breast cancer. • The adjuvant treatment of adult patients with HER2-positive early breast cancer at high risk of recurrence. **2. Metastatic Breast Cancer (MBC)** Phesgo is indicated for use in combination with docetaxel for the treatment of adult patients with HER2- positive metastatic breast cancer who have not received prior anti HER2 therapy or chemotherapy for metastatic disease. **Type of dosage form:** Solution for subcutaneous injection **Dosage and Administration:** Phesgo therapy should only be administered under the supervision of a healthcare professional experienced in the treatment of cancer patients. Patients currently receiving intravenous pertuzumab and trastuzumab can switch to Phesgo. Phesgo is for subcutaneous (SC) use in the thigh only. Do not administer intravenously.

	Dose (irrespective of body weight)	Approximate duration of SC injection	Observation time ab
Loading dose	1200 mg pertuzumab/ 600 mg trastuzumab	8 minutes	30 minutes
Maintenance dose (every 3 weeks)	600 mg pertuzumab/ 600 mg trastuzumab	5 minutes	15 minutes

In patients receiving intravenous pertuzumab and trastuzumab with < 6 weeks since their last dose, Phesgo should be administered as a maintenance dose of 600 mg pertuzumab/600 mg trastuzumab and every 3 weeks for subsequent administrations. In patients receiving intravenous pertuzumab and trastuzumab with ≥ 6 weeks since their last dose, Phesgo should be administered as a loading dose of 1200 mg pertuzumab/600 mg trastuzumab, followed by a maintenance dose of 600 mg pertuzumab/600 mg trastuzumab every 3 weeks for subsequent administrations. **Contraindications:** Phesgo is contraindicated in patients with a known hypersensitivity to pertuzumab, trastuzumab or any of the excipients. **Warnings and Precautions**: *Left ventricular dysfunction:* Decreases in LVEF have been reported with drugs that block HER2 activity, including pertuzumab and trastuzumab. The incidence of symptomatic left ventricular systolic dysfunction (LVD [congestive heart failure]) was higher in patients treated with pertuzumab in combination with trastuzumab and chemotherapy compared to trastuzumab and chemotherapy**.** *Injection-related reactions (IRRs):* Phesgo has been associated with injection-related reactions. Injection-related reactions were defined as any systemic reaction with symptoms such as fever, chills, headache, likely due to a release of cytokines occurring within 24 hours of administration of Phesgo. *Hypersensitivity reactions/anaphylaxis:* Patients should be observed closely for hypersensitivity reactions. Although severe hypersensitivity reactions, including anaphylaxis and events with fatal outcomes, have not been observed in patients treated with Phesgo, caution should be exercised as these have been associated with intravenous pertuzumab in combination with trastuzumab and chemotherapy. *Use in Special population: Fertility:* No specific fertility studies in animals have been performed to evaluate the effects of Phesgo. No specific fertility studies in animals have been performed to evaluate the effect of pertuzumab. No adverse effects on male and female reproductive organs were observed in repeat-dose toxicity studies of pertuzumab for up to six month duration in cynomolgus monkeys. Reproduction studies conducted in cynomolgus monkeys with trastuzumab revealed no evidence of impaired fertility in female cynomolgus monkeys. *Contraception:* Women of childbearing potential including those who are partners of male patients should use effective contraception during treatment with Phesgo and for 7 months following the last dose of Phesgo. *Pregnancy:* Phesgo should be avoided during pregnancy unless the potential benefit for the mother outweighs the potential risk to the fetus. No clinical studies of Phesgo in pregnant women have been performed. Pertuzumab administered intravenously to cynomolgus monkeys during organogenesis led to oligohydramnios, delayed renal development and embryo fetal death. In the post-marketing setting for trastuzumab, cases of fetal renal growth and/or function impairment in association with oligohydramnios, some of which resulted in fatal pulmonary hypoplasia of the fetus, have been reported in pregnant women. Based on the aforementioned animal studies and post-marketing data, Phesgo has the potential to cause fetal harm when administered to a pregnant woman. Women who become pregnant should be advised of the possibility of harm to the fetus. If a pregnant woman is treated with Phesgo, or if a patient becomes pregnant while receiving Phesgo or within 7 months following the last dose of Phesgo, close monitoring by a multidisciplinary team is desirable. *Labor and Delivery:* The safe use of Phesgo during labor and delivery has not been established. *Lactation:* As human IgG is excreted in human milk, and the potential for absorption and harm to the infant is unknown, women should be advised to discontinue nursing during Phesgo therapy and for 7 months after the last dose of Phesgo. *Pediatric use:* The safety and efficacy of Phesgo in pediatric patients below 18 years of age have not been established. *Geriatric use:* No overall differences in efficacy and safety of Phesgo was observed in patients ≥65 (n=26) and <65 years of age (n=222). However, with intravenous pertuzumab in combination with trastuzumab, the incidence of the following all grade adverse events were at least 5% higher in patients ≥65 years of age (n=418) compared to patients <65 years of age (n=2926): decreased appetite, anemia, weight decreased, asthenia, dysgeusia, neuropathy peripheral, hypomagnesemia and diarrhea. **Undesirable Effects:** This is not the complete list. The very commonly reported Adverse Events (AEs) with Phesgo includes Neutropenia, Anemia, Febrile neutropenia, Leukopenia, Lacrimation increased, Diarrhea, Nausea, Vomiting, Stomatitis, Constipation, Dyspepsia, Abdominal pain, Fatigue, Mucosal inflammation, Asthenia, Pyrexia, Edema peripheral, Injection site reactions, Nasopharyngitis, Decreased appetite, Arthralgia, Myalgia, Pain in extremity, Dysgeusia, Headache, Peripheral sensory neuropathy, Neuropathy peripheral, Dizziness, Paraesthesia, Insomnia, Epistaxis, Cough, Dyspnea, Alopecia, Rash, Nail disorder, Pruritus, Dry skin, Hot flush. **Interactions with other medicinal products and other forms of interaction:** No formal drug-drug interaction studies have been performed. **Overdose:** There is no experience with overdose of Phesgo in human clinical trials. The highest Phesgo dose tested is 1200 mg pertuzumab/600 mg trastuzumab. **Storage:** Vials: - Store in a refrigerator at 2°C - 8°C. Keep vial in the outer carton in order to protect from light. DO NOT FREEZE. This medicine should not be used after the Expiry Date shown on the pack. The 1200 mg pertuzumab/600 mg trastuzumab and 600 mg pertuzumab/600 mg trastuzumab solution are ready to use solutions for injection which does not need to be mixed with other drugs or diluted. Once transferred from the vial to the syringe, the medicinal product is physically and chemically stable for 28 days at 2°C - 8°C or 24 hours at 9°C - 30°C *Shelf-life:* 18 Months Please read full prescribing information before usage. **Details of Permission or License Number with date:** Permission No. IMP/BIO/21/000082 dated 01-Oct-2021 **Date of Revision:** Current at January 2022, Version 2.0

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PHESGO™
PERTUZUMAB-TRASTUZUMAB