# DOCEtaxel, CARBOplatin and Pertuzumab/Trastuzumab (Phesgo®)(TCHP) Therapy

## INDICATIONS FOR USE:

| INDICATION | ICD10 | Regimen Code | Reimbursement status |
|---|---|---|---|
| Neoadjuvant treatment of adult patients with HER2-positive locally advanced, inflammatory or early breast cancer at high risk of recurrence. | C50 | 00789a | CARBOplatin and DOCEtaxel: Hospital<br>Pertuzumab/trastuzumab (Phesgo®): ODMS 20/12/22 |

## TREATMENT:

*The starting dose of the drugs detailed below may be adjusted downward by the prescribing clinician, using their independent medical judgement, to consider each patients individual clinical circumstances.*

Pertuzumab/trastuzumab (Phesgo®), DOCEtaxel and CARBOplatin are administered once every 21 days for 6 cycles or until disease progression or unacceptable toxicity develops.

Following surgery, adjuvant trastuzumab treatment continues once every 21 days for a further 12 cycles, continuing for a total of one year from date of first dose (usually 18 doses of trastuzumab in total, including the initial loading dose). Refer to NCCP Regimens 00200 Trastuzumab IV Monotherapy -21 days or 00285 Trastuzumab SC - 21 days.

Facilities to treat anaphylaxis MUST be present when systemic anti-cancer therapy (SACT) is administered.

**Cycle 1: Pertuzumab/trastuzumab (Phesgo®) loading dose**

| Order of Admin | Day | Drug | Dose | Route | Diluent & Rate | Cycle |
|---|---|---|---|---|---|---|
| 1 | 1 | Pertuzumab/ trastuzumab (Phesgo®) | 1200mg/600mg | SC (Observe for 30 minutes post injection [a]) | Over 8 mins | Cycle 1 only |
| 2 | 1 | DOCEtaxel[b] | 75mg/m$^2$ | IV infusion | 250ml 0.9% sodium chloride over 60min[c] | Cycle 1 only |
| 3 | 1 | CARBOplatin | AUC 6 | IV infusion | 500ml glucose 5% over 30 min | Cycle 1 only |

[a]Patients should be observed for injection-related reactions and hypersensitivity reactions. Observation period should start following administration of Phesgo® and be completed prior to any subsequent administration of chemotherapy. Any deviation should be noted in local policies.

[b]Primary prophylaxis with G-CSF should be considered to reduce the risk of neutropenic complications. (See Adverse Effects/Regimen Specific Complications)

[c]Concentration of final volume should be <0.74mg/ml. Use non-PVC infusion bag.

**Cycles 2 - 6:**

| Order of Admin | Day | Drug | Dose | Route | Diluent & Rate | Cycle |
|---|---|---|---|---|---|---|
| 1 | 1 | Pertuzumab/ trastuzumab (Phesgo®) | 600mg/600mg | SC (Observe for 15 minutes post injection[a]) | Over 5 mins if no adverse reactions | Every 21 days |
| 2 | 1 | DOCEtaxel[b] | 75mg/m$^2$ | IV infusion | 250ml 0.9% sodium chloride over 60min[c] | Every 21 days |
| 3 | 1 | CARBOplatin | AUC 6 | IV infusion | 500ml glucose 5% over 30min | Every 21 days |
| [a]Patients should be observed for injection-related reactions and hypersensitivity reactions. Observation period should start following administration of Phesgo® and be completed prior to any subsequent administration of chemotherapy. Any deviation should be noted in local policies. | | | | | | |
| [b]Primary prophylaxis with G-CSF should be considered to reduce the risk of neutropenic complications. ( See Adverse Effects/Regimen Specific Complications) | | | | | | |
| [c]Concentration of final volume should be <0.74mg/ml. Use non-PVC infusion bag. | | | | | | |

CARBOplatin dose:

The dose in mg of CARBOplatin to be administered is calculated as follows:

Dose (mg) = target AUC (mg/ml x min) x (GFR ml/min +25)

- **Measured GFR** (e.g. nuclear renogram) is preferred whenever feasible.
- Estimation of GFR (eGFR) can be done by using the Wright formula or using the Cockcroft and Gault formula to measure creatinine clearance.
- The GFR used to calculate the AUC dosing should not exceed 125ml/min.
- For obese patients and those with a low serum creatinine, for example, due to low body weight or post-operative asthenia, the formulae may not give accurate results and measured GFR is recommended.
    - Where obesity (body mass index [BMI] ≥ 30 kg/m$^2$) or overweight (BMI 25-29.9) is likely to lead to an overestimate of GFR and isotope GFR is not available, the use of the adjusted ideal body weight for Cockcroft and Gault may be considered.
    - Where serum creatinine is less than 63 micromol/L, the use of a creatinine value of 62 micromol/L or a steady pre-operative creatinine value may be considered.
- These comments do not substitute for the clinical judgement of a physician experienced in prescription of CARBOplatin.

WRIGHT FORMULA

There are two versions of the formula depending on how serum creatinine values are obtained, by the kinetic Jaffe method or the enzymatic method. The formula can be further adapted if covariant creatine kinase (CK) values are available (not shown).

1. *SCr measured using enzymatic assay*.

$$\text{GFR (ml/min)} = \frac{(6230 - 32.8 \times \text{Age}) \times \text{BSA} \times (1 - 0.23 \times \text{Sex})}{\text{SCr (micromol/min)}}$$

2. *SCr measured using Jaffe assay*

$$\text{GFR (ml/min)} = \frac{(6580 - 38.8 \times \text{Age}) \times \text{BSA} \times (1 - 0.168 \times \textit{Sex})}{\text{SCr (micromol/min)}}$$

Key: Sex = 1 if female, 0 if male; Age in years; BSA= DuBois BSA

**COCKCROFT-GAULT FORMULA**

$$\textbf{GFR (ml/min)} = \frac{\textbf{S x (140 - age in years) x wt (kg)}}{\textbf{serum creatinine (micromol/L)}}$$

S= 1.04 for females and 1.23 for males

## ELIGIBILITY:

- Indication as above
- HER2 positive as demonstrated by a validated test method
- ECOG status 0-1
- Patients should have a pre-treatment LVEF of ≥ 55%
- Adequate organ function

## EXCLUSIONS:

- Hypersensitivity to pertuzumab, trastuzumab, murine proteins, DOCEtaxel, CARBOplatin* or any of the excipients
- Clinically significant cardiac disease (history of symptomatic ventricular arrhythmias, congestive heart failure or myocardial infarction within previous 12 months)
- Patients experiencing dyspnoea at rest due to complications of advanced malignancy and comorbidities may be at increased risk of a fatal infusion reaction with trastuzumab
- Significant hepatic dysfunction, contraindicating DOCEtaxel
- Baseline neutrophil count < 1.5 x $10^9$/L
- ≥ Grade 2 sensory or motor neuropathy

- Uncontrolled hypertension
- Pregnancy or breast feeding

*If it is felt that the patient may have a major clinical benefit from CARBOplatin, it may in exceptional circumstances be feasible to rechallenge a patient with a prior mild hypersensitivity reaction e.g. using a desensitisation protocol, but only with immunology advice, premedication as advised, and a desensitisation protocol under carefully controlled conditions with resuscitation facilities available and medical and/or ITU/ HDU supervision

## PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant Medical Oncologist.

## TESTS:

**Baseline tests:**

- HER2 positive as demonstrated by a validated test method
- FBC, renal and liver profile
- Isotope GFR measurement (preferred) or GFR / Cr Clearance estimation
- Cardiac function (LVEF using ECHO or MUGA scan)

**Regular tests:**

- FBC, renal and liver profile before each cycle
- MUGA scan or echocardiogram every 12 weeks during treatment with pertuzumab/trastuzumab (Phesgo®) and at completion of therapy. Where there are signs of cardiac impairment four to eight weekly checks may be more appropriate

**Disease monitoring:**

Disease monitoring should be in line with the patient's treatment plan and any other test/s as directed by the supervising Consultant.

## DOSE MODIFICATIONS:

- Any dose modification should be discussed with a Consultant.

**Trastuzumab and Pertuzumab:**

- None usually recommended. Doses are held or discontinued if unacceptable toxicity occurs. Please see Table 1 below for recommendations on resuming dosing pertuzumab/trastuzumab (Phesgo®) after a dose delay or missed doses.
- Patients may continue therapy during periods of reversible chemotherapy-induced myelosuppression but they should be monitored carefully for complications of neutropenia during this time.

**Table 1: Dose modifications of pertuzumab/trastuzumab (Phesgo®) for delayed or missed doses**

| Time between two sequential infusions | Dose modification |
|---|---|
| <6 weeks | The maintenance dose of pertuzumab/trastuzumab **(**Phesgo®) 600 mg/600 mg should be administered as soon as possible. Thereafter, continue with the 3-weekly schedule. |
| ≥6 weeks | A loading dose of pertuzumab/trastuzumab **(**Phesgo®) 1200 mg/600 mg should be re-administered followed by maintenance dose of pertuzumab/trastuzumab **(**Phesgo®) 600 mg/600 mg every 3 weeks thereafter. |

**Table 2: Switching from intravenous pertuzumab and trastuzumab administration to Phesgo®**

| Time since last dose | Dose of Phesgo® |
|---|---|
| <6 weeks | Administer as a maintenance dose of 600 mg pertuzumab/600 mg trastuzumab and every 3 weeks for subsequent administrations. |
| ≥6 weeks | 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. |

**Haematological:**

- Doses are adjusted based on Day 1 counts and previous cycle febrile neutropenia.
- No dose reduction for nadir counts.
- **No reduction of pertuzumab/trastuzumab (Phesgo®) dose for haematologic toxicity.**

**Table 3: Dose modification of DOCEtaxel and CARBOplatin for haematological toxicity**

| ANC (x $10^9$/L) | | Platelets (x $10^9$/L) | Dose of DOCEtaxel and CARBOplatin | G-CSF option |
|---|---|---|---|---|
| ≥ 1.5 | **and** | ≥ 100 | 100% | |
| 1 -1.49 | **and** | ≥ 100 | 75% | 100% regimen |
| < 1.0 | **or** | < 100 | Delay until ANC ≥ 1.5 and platelets ≥ 100 then give 75% | Delay until ANC ≥ 1.5 and platelets ≥ 100 then give 100% |

**Febrile Neutropenia:**

**Table 4: Dose modification for febrile neutropenia**

| Event | Dose reduction option | G-CSF option |
|---|---|---|
| 1st event | 75% of previous cycles dose if Day 1 ≥ 1.5 and platelets ≥ 100 | 100% regimen |
| 2nd event | 50% of original cycle dose if Day 1 ≥ 1.5 and platelets ≥ 100 | 75% regimen |
| 3rd event | Discontinue regimen or switch to G-CSF option | 50% regimen |

## Renal and Hepatic Impairment:

**Table 5: Dose modification of pertuzumab, trastuzumab, DOCEtaxel and CARBOplatin in renal and hepatic impairment**

| Drug | Renal Impairment | Hepatic Impairment |
|---|---|---|
| **Pertuzumab/ trastuzumab (Phesgo®)** | Dose adjustments are not needed in patients with mild or moderate renal impairment. No dose recommendations can be made for patients with severe renal impairment because of the limited pharmacokinetic (PK) data available. | The safety and efficacy have not been studied in patients with hepatic impairment. Patients with hepatic impairment are unlikely to require dose adjustment. No specific dose adjustment are recommended. |
| **DOCEtaxel** | No dose reduction necessary. | **See Table 6 below** |
| **CARBOplatin** | • See note below[a] | No dose modification required |

**[a]Renal dysfunction and CARBOplatin:**

- Patients with creatinine clearance values of <60ml/min are at greater risk of developing myelosuppression.
- If GFR between 20 to ≤ 30ml/min, CARBOplatin should be administered with extreme caution
- If GFR ≤ 20ml/min, CARBOplatin should not be administered at all
- If Cockcroft & Gault or Wright formula are used, the dose should be calculated as required per cycle based on a serum creatinine obtained within 48 hrs of drug administration. If isotope GFR is used, the dose can remain the same provided the serum creatinine is ≤110% of its value at the time of the isotope measurement. If the serum creatinine increases, consideration should be given to remeasuring the GFR or to estimating it using Cockcroft & Gault or Wright formulae.

**DOCEtaxel and hepatic dysfunction:**

- DOCEtaxel doses shall be modified for hepatic toxicity. If DOCEtaxel is delayed due to hepatic toxicity, other drugs being used in combination at that time shall also be delayed and administered when DOCEtaxel is resumed.
- Since no data in patients with abnormal bilirubin level treated with lower dose of DOCEtaxel are available, in the event that bilirubin levels are abnormal during the study, the next cycle will be delayed by a maximum of two weeks. If no recovery, the patient should be taken off chemotherapy. Treatment with pertuzumab/trastuzumab (Phesgo®) may continue.
- In the event that AST and/or ALT and/or alkaline phosphatase levels are abnormal in the absence of relapse, the following dose modifications should apply (Table 6).
- Once the dose is reduced due to impaired liver function, no further dose reduction is recommended if no worsening of the parameters is observed.
- In case of recovery of liver function tests on the following cycle, the dose should be re-escalated to the previous dose level.

**Table 6: Dose Modification of DOCEtaxel based on hepatic dysfunction**

| AST / ALT Values | Alkaline Phosphatase Values | Dose Modification |
|---|---|---|
| ≤ 1.5 x ULN | ≤ 5 x ULN | No dose modification. |
| > 1.5 x ULN to ≤2.5 x ULN | ≤ 2.5 x ULN | No dose modification. |
| > 2.5 x ULN to ≤5 x ULN | ≤ 2.5 x ULN | Reduce dose of DOCEtaxel from 75 to 60mg/m$^2$ |
| > 1.5 x ULN to ≤ 5 x ULN | > 2.5 x ULN to ≤ 5 x ULN | Reduce dose of DOCEtaxel from 75 to 60 mg/m$^2$ |
| > 5 x ULN | > 5 x ULN | Dose delay by a maximum of 2weeks.<br>If no recovery to the above figures, patient should go off chemotherapy. |

**Non-Haematological Toxicity:**

Table 7: **Dose modification of pertuzumab/trastuzumab (Phesgo®), DOCEtaxel and CARBOplatin based on adverse events**

| Adverse reactions | Recommended dose modification |
|---|---|
| **Reduction in LVEF to <50% - associated with a fall of ≥ 10% points below pre-treatment values** | Withhold treatment with pertuzumab/trastuzumab (Phesgo®) for at least 3 weeks.<br>Pertuzumab/trastuzumab (Phesgo®) may be resumed if the LVEF has recovered to ≥50% or to a difference of <10% points below pre-treatment values. No improvement or further decline, consider discontinuation. Discuss with consultant and refer to cardiologist. |
| **Symptomatic heart failure** | Discontinue |
| **Grade 4* hypersensitivity reactions** | Discontinue |
| **Grade >2 peripheral neuropathy** | Decrease dose of DOCEtaxel to 60mg/m$^2$<br>If the patient continues to experience these reactions at 60mg/m$^2$, treatment with DOCEtaxel should be discontinued. |
| **Grade ≥3 Stomatitis** | Decrease dose of DOCEtaxel to 60mg/m$^2$<br>If despite dose reduction, stomatitis still occurs at grade ≥ 3, DOCEtaxel will be further reduced from 60 to 50 mg/m$^2$.<br>No further dose reduction is planned. |
| *NCI-CTCAE Grading | |

## SUPPORTIVE CARE:

### EMETOGENIC POTENTIAL:

**Pertuzumab/trastuzumab (Phesgo®):** Minimal **(Refer to local policy)**
**DOCEtaxel**: Low **(refer to local policy)**
**CARBOplatin**: High **(refer to local policy)**

## PREMEDICATIONS:

**Pertuzumab/trastuzumab (Phesgo®):** Not usually required unless the patient has had a previous hypersensitivity. Paracetamol and antihistamine cover should be considered. Patient should be educated about the possibility of delayed infusion-related symptoms.

**DOCEtaxel:** dexAMETHasone 8mg PO twice daily for 3 days, starting one day prior to each DOCEtaxel administration unless contraindicated. Patient must receive minimum of 3 doses pre-treatment
***Consideration may be given, at the discretion of the prescribing consultant, to the use of a single dose of dexamethasone 20mg IV immediately before chemotherapy where patients have missed taking the oral premedication dexAMETHasone as recommended by the manufacturer.***

**OTHER SUPPORTIVE CARE:** No specific recommendations

## ADVERSE EFFECTS / REGIMEN SPECIFIC COMPLICATIONS:

*The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details*.

- **Febrile neutropenia**: Fever or other evidence of infection must be assessed promptly and treated appropriately. DOCEtaxel should only be administered when the neutrophil count is ≥ $1.5x10^9$cells/L.

**Pertuzumab/trastuzumab (Phesgo®)**

- **Left ventricular dysfunction (including congestive heart failure):** 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. In the adjuvant setting, the majority of cases of symptomatic heart failure reported were in patients who received anthracycline-based chemotherapy. Patients who have received prior anthracyclines or prior radiotherapy to the chest area may be at higher risk of LVEF declines based on studies with intravenous pertuzumab in combination with trastuzumab and chemotherapy. Phesgo® has not been studied in patients with: a pre-treatment LVEF value of < 55 % (EBC) or < 50 % (MBC); a prior history of congestive heart failure (CHF); conditions that could impair left ventricular function such as uncontrolled hypertension, recent myocardial infarction, serious cardiac arrhythmia requiring treatment or a cumulative prior anthracycline exposure to > 360 mg/$m^2$ of DOXOrubicin or its equivalent. In addition, pertuzumab in combination with trastuzumab and chemotherapy has not been studied in patients with decreases in LVEF < 50 % during prior trastuzumab adjuvant therapy. Assess LVEF prior to initiation of Phesgo® and at regular intervals during treatment (e.g. once during neoadjuvant treatment and every 12 weeks in the adjuvant and metastatic setting) to ensure that LVEF is within normal limits. If the LVEF has declined and has not improved, or has declined further at the subsequent assessment, discontinuation of Phesgo® should be strongly considered, unless the benefits for the individual patient are deemed to outweigh the risks. Cardiac risk should be carefully considered and balanced against the medical need of the individual patient before use of Phesgo®

with an anthracycline. Based on the pharmacological actions of HER2-targeted agents and anthracyclines, the risk of cardiac toxicity might be expected to be higher with concomitant use of Phesgo® and anthracyclines than with sequential use.

- **Injection-related reactions/infusion-related reactions (IRRs):** Phesgo® has been associated with injection-related reactions. Close observation of the patient during and for 30 minutes after administration of the loading dose and during and for 15 minutes following the administration of the maintenance dose of Phesgo® is recommended. If a significant injection-related reaction occurs, the injection should be slowed down or paused and appropriate medical therapies should be administered. Patients should be evaluated and carefully monitored until complete resolution of signs and symptoms. Permanent discontinuation should be considered in patients with severe injection-related reactions. This clinical assessment should be based on the severity of the preceding reaction and response to administered treatment for the adverse reaction. Although fatal outcomes resulting from injection-related reactions have not been observed with Phesgo®, caution should be exercised, as fatal infusion related-reactions have been associated with intravenous pertuzumab in combination with intravenous trastuzumab and chemotherapy.
- **Hypersensitivity reactions/anaphylaxis:** Patients should be observed closely for hypersensitivity reactions. Severe hypersensitivity reactions, including anaphylaxis and events with fatal outcomes, have been observed with pertuzumab in combination with trastuzumab and chemotherapy. The majority of anaphylactic reactions occurred within the first 6-8 cycles of treatment when pertuzumab and trastuzumab were given in combination with chemotherapy. Medicinal products to treat such reactions, as well as emergency equipment, should be available for immediate use. Phesgo® must be permanently discontinued in case of NCI-CTCAE Grade 4 hypersensitivity reactions (anaphylaxis), bronchospasm or acute respiratory distress syndrome. Phesgo® is contraindicated in patients with known hypersensitivity to pertuzumab, trastuzumab or to any of its excipients.
- **Diarrhoea:** Phesgo® may elicit severe diarrhoea. Diarrhoea is most frequent during concurrent administration with taxane therapy. Elderly patients (≥ 65 years) have a higher risk of diarrhoea compared with younger patients (< 65 years). Treat diarrhoea according to standard practice and guidelines. Early intervention with loperamide, fluids and electrolyte replacement should be considered, particularly in elderly patients, and in case of severe or prolonged diarrhoea. Interruption of treatment with Phesgo® should be considered if no improvement in the patient's condition is achieved. When the diarrhoea is under control treatment with Phesgo® may be reinstated.
- **Pulmonary events:** Severe pulmonary events have been reported with the use of trastuzumab. These events have occasionally been fatal. These events may occur as part of an infusion-related reaction or with a delayed onset. Patients experiencing dyspnoea at rest due to complications of advanced malignancy and comorbidities may be at increased risk of pulmonary events. Therefore, these patients should not be treated with Phesgo®. Caution should be exercised for pneumonitis, especially in patients being treated concomitantly with taxanes.

**DOCEtaxel:**

- **Fluid Retention**: dexAMETHasone premedication must be given to reduce the incidence and severity of fluid retention. It can also reduce the severity of the hypersensitivity reaction.
- **Neutropenic Enterocolitis:** A number of cases of neutropenic enterocolitis have been reported in patients treated with DOCEtaxel in France. This is a known and rare side effect of DOCEtaxel which may affect up to one in 1,000 people.
- **Hypersensitivity Reactions:** Patients should be observed closely for hypersensitivity reactions

especially during the first and second infusions. Hypersensitivity reactions may occur within a few minutes following the initiation of the infusion of DOCEtaxel, thus facilities for the treatment of hypotension and bronchospasm should be available. If hypersensitivity reactions occur, minor symptoms such as flushing or localized cutaneous reactions do not require interruption of therapy. However, severe reactions, such as severe hypotension, bronchospasm or generalised rash/erythema require immediate discontinuation of DOCEtaxel and appropriate therapy. Patients who have developed severe hypersensitivity reactions should not be re-challenged with DOCEtaxel.

- **Extravasation**: DOCEtaxel causes pain and tissue necrosis if extravasated (Refer to local extravasation guidelines).
- **Hepatic Dysfunction**: DOCEtaxel undergoes hepatic metabolism. Hepatic dysfunction (particularly elevated AST) may lead to increased toxicity and usually requires a dose reduction.

**CARBOplatin:**

- **Hypersensitivity:** Reactions to CARBOplatin may develop in patients who have been previously exposed to platinum therapy. However allergic reactions have been observed upon initial exposure to CARBOplatin.
- **Neurotoxicity and ototoxicity:** Neurological evaluation and an assessment of hearing should be performed on a regular basis, especially in patients receiving high dose CARBOplatin. Neurotoxicity, such as parasthesia, decreased deep tendon reflexes, and ototoxicity are more likely seen in patients previously treated with CISplatin, other platinum treatments and other ototoxic agents. Frequency of neurologic toxicity is also increased in patients older than 65 years.

## DRUG INTERACTIONS:

- A possible interaction with warfarin has been reported. An increased INR and bleeding may occur in patients previously stabilized on warfarin. The interaction was noted in two patients after 8-10 doses of trastuzumab. An INR prior to starting the trastuzumab is recommended, then every 2 weeks for the first 3 months and then monthly if stable. Inform patient to watch for any bleeding. Modification of the warfarin dose may be needed.
- Risk of drug interactions causing increased concentrations of DOCEtaxel with CYP3A inhibitors. Patients should also be counselled with regard to consumption of grapefruit juice.
- Risk of drug interactions causing decreased concentrations of DOCEtaxel with CYP3A inducers.
- Avoid concurrent use with nephrotoxic drugs (e.g. aminoglycosides, furosemide, NSAIDS) due to additive nephrotoxicity. If necessary monitor renal function closely.
- Avoid concurrent use with ototoxic drugs (e.g. aminoglycosides, furosemide, NSAIDS). If necessary perform regular audiometric testing.
- Current drug interaction databases should be consulted for more information.

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| Version | Date | Amendment | Approved By |
|---|---|---|---|
| 1 | 15/12/2022 | | Prof Maccon Keane |
| 2 | 10/10/2023 | Updated standard wording for renal dysfunction and CARBOplatin . Updated exclusions section and emetogenic potential of pertuzumab/trastuzumab (Phesgo®). | Prof Maccon Keane |

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.