Merck Sharp & Dohme Corp. ("Merck"), a subsidiary of Merck & Co., Inc., is pleased to announce that ONTRUZANT® (trastuzumab-dttb) for injection, for intravenous use 21 mg/mL, a biosimilar* to Herceptin® (trastuzumab), is available through specialty distributors and wholesalers. Please contact your specialty distributor or wholesaler to confirm product availability.

*Bio similar means that the biological product is approved based on data demonstrating that it is highly similar to an FDA-approved biological product, known as a reference product, and that there are no clinically meaningful differences between the biosimilar product and the reference product. Biosimilarity of ONTRUZANT has been demonstrated for the condition(s) of use (eg, indication(s), dosing regimen(s), strength(s), dosage form(s), and route(s) of administration described in its Full Prescribing Information).

ONTRUZANT is available as follows:

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>HCPCS CODE</th>
<th>DESCRIPTOR1</th>
<th>HOW SUPPLIED</th>
<th>NDC</th>
<th>CATALOG PRICEa</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONTRUZANT</td>
<td>Q5112</td>
<td>Injection, trastuzumab-dttb, biosimilar (ONTRUZANT), 10 mg</td>
<td>Carton with one 150-mg vial, single-dose</td>
<td>0006-5033-02</td>
<td>$1,324.66</td>
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<td></td>
<td></td>
<td></td>
<td>Carton with one 420-mg vial, multi-dose</td>
<td>0006-5034-02</td>
<td>$3,709.04</td>
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</tbody>
</table>


aMerck catalog price as of March 2020; subject to change without notice. Catalog price does not necessarily reflect the actual price paid by consumers, payers, or dispensers.

The information provided here is compiled from sources believed to be accurate, but Merck makes no representation that it is accurate. Information about Healthcare Common Procedure Coding System (HCPCS) codes is based on guidance issued by the Centers for Medicare & Medicaid Services (CMS) applicable to Medicare Part B and may not apply to other public or private payers. Consult the relevant manual and/or other guidelines for a description of each code to determine the appropriateness of a particular code and for information on additional codes. This information is subject to change. Merck cautions that payer coding requirements vary and can frequently change, so it is important to regularly check with each payer or, where applicable, the Medicare Administrative Contractor, as to payer-specific requirements.

Always verify the payer’s coding requirements prior to submitting a claim. Miscellaneous codes such as “not otherwise classified” (J9999) or “unclassified biologics” (J3590) may be used in situations where a payer may have different coding requirements.

Brands mentioned are the trademarks of their respective owners

INDICATIONS AND USAGE

Adjuvant Breast Cancer
ONTRUZANT is indicated for adjuvant treatment of HER2-overexpressing node-positive or node-negative (ER/PR-negative or with one high-risk feature) breast cancer:

• As part of a treatment regimen containing doxorubicin, cyclophosphamide, and either paclitaxel or docetaxel
• With docetaxel and carboplatin
• As a single agent following multimodality anthracycline-based therapy

Select patients for therapy based on an FDA-approved companion diagnostic for a trastuzumab product.

Metastatic Breast Cancer
ONTRUZANT is indicated:
• In combination with paclitaxel for the first-line treatment of HER2-overexpressing metastatic breast cancer
• As a single agent for treatment of HER2-overexpressing breast cancer in patients who have received one or more chemotherapy regimens for metastatic disease

Select patients for therapy based on an FDA-approved companion diagnostic for a trastuzumab product.

**Metastatic Gastric Cancer**
ONTRUZANT is indicated, in combination with cisplatin and capecitabine or 5-fluorouracil, for the treatment of patients with HER2 overexpressing metastatic gastric or gastroesophageal junction adenocarcinoma who have not received prior treatment for metastatic disease.

Select patients for therapy based on an FDA-approved companion diagnostic for a trastuzumab product.

**SELECTED SAFETY INFORMATION**

**CARDIOMYOPATHY**
• Administration of trastuzumab products can result in subclinical and clinical cardiac failure. The incidence and severity was highest in patients receiving a trastuzumab product with anthracycline-containing chemotherapy regimens. In a pivotal adjuvant breast cancer trial, one patient who developed congestive heart failure (CHF) died of cardiomyopathy.
• Evaluate left ventricular function in all patients prior to and during treatment with ONTRUZANT. Discontinue ONTRUZANT treatment in patients receiving adjuvant therapy and withhold ONTRUZANT in patients with metastatic disease for clinically significant decrease in left ventricular function.

**INFUSION REACTIONS; PULMONARY TOXICITY**
• Administration of trastuzumab products can result in serious and fatal infusion reactions and pulmonary toxicity. Symptoms usually occur during or within 24 hours of administration. Interrupt ONTRUZANT infusion for dyspnea or clinically significant hypotension. Monitor patients until symptoms completely resolve. Discontinue ONTRUZANT for anaphylaxis, angioedema, interstitial pneumonitis, or acute respiratory distress syndrome.

**EMBRYO-FETAL TOXICITY**
• Exposure to trastuzumab products during pregnancy can result in oligohydramnios and oligohydramnios sequence manifesting as pulmonary hypoplasia, skeletal abnormalities, and neonatal death. Advise patients of these risks and the need for effective contraception.

**WARNINGS AND PRECAUTIONS**

**CARDIOMYOPATHY**
Trastuzumab products can cause left ventricular cardiac dysfunction, arrhythmias, hypertension, disabling cardiac failure, cardiomyopathy, and cardiac death. Trastuzumab products can also cause asymptomatic decline in left ventricular ejection fraction (LVEF).

There is a 4- to 6-fold increase in the incidence of symptomatic myocardial dysfunction among patients receiving trastuzumab products as a single agent or in combination therapy compared with those not receiving trastuzumab products. The highest absolute incidence occurs when a trastuzumab product is administered with an anthracycline.
Withhold ONTRUZANT for ≥16% absolute decrease in LVEF from pretreatment values or an LVEF value below institutional limits of normal and ≥10% absolute decrease in LVEF from pretreatment values. The safety of continuation or resumption of ONTRUZANT in patients with trastuzumab-product-induced left ventricular cardiac dysfunction has not been studied.

Patients who receive anthracycline after stopping ONTRUZANT may also be at increased risk of cardiac dysfunction.

**Cardiac Monitoring:** Conduct thorough cardiac assessment, including history, physical examination, and determination of LVEF by echocardiogram or MUGA scan. The following schedule is recommended:

- Baseline LVEF measurement immediately prior to initiation of ONTRUZANT
- LVEF measurements every 3 months during and upon completion of ONTRUZANT
- Repeat LVEF measurement at 4-week intervals if ONTRUZANT is withheld for significant left ventricular cardiac dysfunction.
- LVEF measurements every 6 months for at least 2 years following completion of ONTRUZANT as a component of adjuvant therapy.

**INFUSION REACTIONS**

Infusion reactions consist of a symptom complex characterized by fever and chills, and on occasion included nausea, vomiting, pain (in some cases at tumor sites), headache, dizziness, dyspnea, hypotension, rash, and asthenia.

In postmarketing reports, serious and fatal infusion reactions have been reported. Severe reactions, which include bronchospasm, anaphylaxis, angioedema, hypoxia, and severe hypotension were usually reported during or immediately following the initial infusion. However, the onset and clinical course were variable, including progressive worsening, initial improvement followed by clinical deterioration, or delayed post-infusion events with rapid clinical deterioration. For fatal events, death occurred within hours to days following a serious infusion reaction.

Interrupt ONTRUZANT infusion in all patients experiencing dyspnea, clinically significant hypotension, and intervention of medical therapy administered (which may include epinephrine, corticosteroids, diphenhydramine, bronchodilators, and oxygen). Patients should be evaluated and carefully monitored until complete resolution of signs and symptoms. Permanent discontinuation should be strongly considered in all patients with severe infusion reactions.

There are no data regarding the most appropriate method of identification of patients who may safely be retreated with trastuzumab products after experiencing a severe infusion reaction. Prior to resumption of trastuzumab infusion, the majority of patients who experienced a severe infusion reaction were premedicated with antihistamines and/or corticosteroids. While some patients tolerated trastuzumab infusions, others had recurrent severe infusion reactions despite premedications.

**EMBRYO-FETAL TOXICITY**

Trastuzumab products can cause fetal harm when administered to a pregnant woman. In postmarketing reports, use of trastuzumab during pregnancy resulted in cases of oligohydramnios and oligohydramnios sequence manifesting as pulmonary hypoplasia, skeletal abnormalities, and neonatal death.

Verify the pregnancy status of females of reproductive potential prior to the initiation of ONTRUZANT. Advise pregnant women and females of reproductive potential that exposure to ONTRUZANT during pregnancy or within 7 months prior to conception can result in fetal harm. Advise females of
reproductive potential to use effective contraception during treatment and for 7 months following the last
dose of ONTRUZANT.

PULMONARY TOXICITY
Trastuzumab product use can result in serious and fatal pulmonary toxicity. Pulmonary toxicity includes
dyspnea, interstitial pneumonitis, pulmonary infiltrates, pleural effusions, noncardiogenic pulmonary edema, pulmonary insufficiency and hypoxia, acute respiratory distress syndrome, and pulmonary fibrosis. Such events can occur as sequelae of infusion. Patients with symptomatic intrinsic lung disease or with extensive tumor involvement of the lungs, resulting in dyspnea at rest, appear to have more severe toxicity.

EXACERBATION OF CHEMOTHERAPY-INDUCED NEUTROPENIA
In randomized, controlled clinical trials, the per-patient incidences of NCI-CTC Grade 3 to 4 neutropenia and of febrile neutropenia were higher in patients receiving trastuzumab in combination with myelosuppressive chemotherapy as compared to those who received chemotherapy alone. The incidence of septic death was similar among patients who received trastuzumab and those who did not.

DRUG INTERACTIONS
Patients who receive anthracycline after stopping trastuzumab products may be at increased risk of cardiac dysfunction because of trastuzumab’s long washout period based on population PK analysis. If possible, physicians should avoid anthracycline-based therapy for up to 7 months after stopping trastuzumab products. If anthracyclines are used, the patient’s cardiac function should be monitored carefully.

ADVERSE REACTIONS
The most common adverse reactions in patients receiving trastuzumab products in the adjuvant and metastatic breast cancer setting are fever, chills, nausea, vomiting, infusion reactions, diarrhea, infections, increased cough, headache, fatigue, dyspnea, rash, neutropenia, anemia, and myalgia. Adverse reactions requiring interruption or discontinuation of trastuzumab product treatment include CHF, significant decline in left ventricular cardiac function, severe infusion reactions, and pulmonary toxicity.

In the metastatic gastric cancer setting, the most common adverse reactions (≥10%) that were increased (≥5% difference) in the patients receiving trastuzumab as compared to patients receiving chemotherapy alone were neutropenia, diarrhea, fatigue, anemia, stomatitis, weight loss, upper respiratory tract infections, fever, thrombocytopenia, mucosal inflammation, nasopharyngitis, and dysgeusia. The most common adverse reactions which resulted in discontinuation of trastuzumab treatment in the absence of disease progression were infection, diarrhea, and febrile neutropenia.

USE IN SPECIFIC POPULATIONS
LACTATION
There is no information regarding the presence of trastuzumab products in human milk, the effects on the breastfed infant, or the effects on milk production. Published data suggest human IgG is present in human milk but does not enter the neonatal and infant circulation in substantial amounts. Consider the developmental and health benefits of breastfeeding along with the mother’s clinical need for ONTRUZANT treatment and any potential adverse effects on the breastfed child from ONTRUZANT or from the underlying maternal condition. This consideration should also take into account the trastuzumab product washout period of 7 months.
**PEDIATRIC USE**
The safety and effectiveness of trastuzumab products in pediatric patients have not been established.

**GERIATRIC USE**
Trastuzumab has been studied in patients who were 65 years of age or over in the adjuvant and metastatic breast cancer treatment settings. The risk of cardiac dysfunction was increased in geriatric patients, as compared to younger patients, in both those receiving treatment for metastatic disease or adjuvant therapy.

**Before prescribing ONTRUZANT, please read the accompanying Prescribing Information, including the Boxed Warning about cardiomyopathy, infusion reactions (pulmonary toxicity), and embryo-fetal toxicity.**

HER2, human epidermal growth factor receptor 2; ER/PR, estrogen receptor/progesterone receptor; FDA, US Food and Drug Administration; MUGA, multigated acquisition; NCI-CTC, National Cancer Institute - Common Terminology Criteria; PK, pharmacokinetics; IgG, Immunoglobulin G.

If you have any questions about ONTRUZANT, please contact your Merck Account Executive.