

Summary of Investigation Results

Tucatinib ethanolate and Palovarotene

Non-proprietary name Brand name	Non-proprietary name	Brand name (marketing authorization holder)
	a. Tucatinib ethanolate b. Palovarotene	a. Tukysa Tablets 50 mg, 150 mg (Pfizer Japan Inc.) b. Sohonos Capsules 1 mg, 1.5 mg, 2.5 mg, 5 mg, 10 mg (IPSEN K.K.)
Japanese market launch	a. April 2026 b. July 2026	
Indications	a. Unresectable or recurrent HER2-positive breast cancer previously treated with chemotherapy b. Fibrodysplasia ossificans progressiva	
Summary of revisions	a. 1. “Patients receiving the following drug: palovarotene” should be added to 2. CONTRAINDICATIONS (This drug is contraindicated to the following patients.). 2. “Palovarotene” should be added to the 10.1 Contraindications for Co-administration (Do not co-administer with the following.) section in 10. INTERACTIONS. b. 1. “Patients receiving tucatinib ethanolate” should be added to 2. CONTRAINDICATIONS (This drug is contraindicated to the following patients.). 2. “Tucatinib ethanolate” should be added to the 10.1 Contraindications for Co-administration (Do not co-administer with the following.) section in 10. INTERACTIONS.	
Investigation results and background of the revision	The pharmacokinetic effect of co-administration of tucatinib ethanolate and palovarotene was evaluated. The strong inhibitory activity of tucatinib ethanolate on CYP3A may increase the exposure to palovarotene, which is metabolized by CYP3A, thereby potentially exacerbating adverse reactions associated with palovarotene. As a result of consultation with expert advisors, the MHLW/PMDA concluded that revision of PRECAUTIONS was necessary. Of note, opinions regarding the impact of contraindicating co-administration of tucatinib ethanolate and palovarotene in clinical settings were sought from relevant academic societies, confirming no specific major problems.	

The expert advisors present at the Expert Discussion regarding the current investigation were nominated based on their conflict of interest declarations concerning the relevant products, pursuant to the "Rules for Convening Expert Discussions, etc., by the Pharmaceuticals and Medical Devices Agency" (PMDA Administrative Rule No. 20-8, dated December 25, 2008).