

Stand up to Chemotherapy induced nausea and vomiting

Yoosetron Inj.

[Palonosetron Hcl injection] – Prefilled Syringe



■ Table of contents

A diagram for a table of contents. On the left is a large blue semi-circle. A light blue arc curves from the top of the semi-circle to the bottom. Three horizontal rounded rectangles are attached to this arc. The top one is light blue with a yellow circle on the left. The middle one is light green with a green circle on the left. The bottom one is light blue with a blue circle on the left. Each rectangle contains text.

Brief summary

Patent Status

What is Palonosetron HCl?

■ Brief summary

Yoosetron Inj. helps prevent nausea and vomiting due to chemotherapy!!

Item	Description
Product Name	Yoosetron Inj.
Type (packing)	1.5ml (5pfs/box) , 5ml (1pfs/box)
Shelf life	24 months
Main Ingredient	Palonosetron HCl 0.056mg/ml (As Palonosetron 0.05mg/ml)
Formulation	Pre-filled Syringe as injection formulation
Administration Route	Intravenous injection
Expected use	Nausea and vomiting
Originator	Aloxi Inj. by Helsinn pharmaceuticals Dublin(Origin)
Advantage	Better injection convenience compared to Aloxi Inj.

■ Patent Status

★ International Existing Patent from Helsinn.

- 1) Liquid pharmaceutical formulations of palonosetron (PCT/EP2004/000888)
- 2) Method of treating post operative nausea and vomiting (PCT/EP2004/001558)

* Above two patents are mainly related to using EDTA as antioxidant.
However, we didn't use EDTA as antioxidant when we develop product.

★ YooYoung's Patent

- 1) Pharmaceutical Composition Containing Palonosetron as active ingredient
[PCT/KR2017/011292 (local patent no.: 10-2016-0152396)]
- **Summary: The formulation of the present invention can significantly obtain storage stability without mixing in EDTA unlike conventional inventions.**

* Designated nations have not yet decided at current PCT phase.

**Yoosetron Inj. has avoided
Patent Infringement
with our own Patent!!**

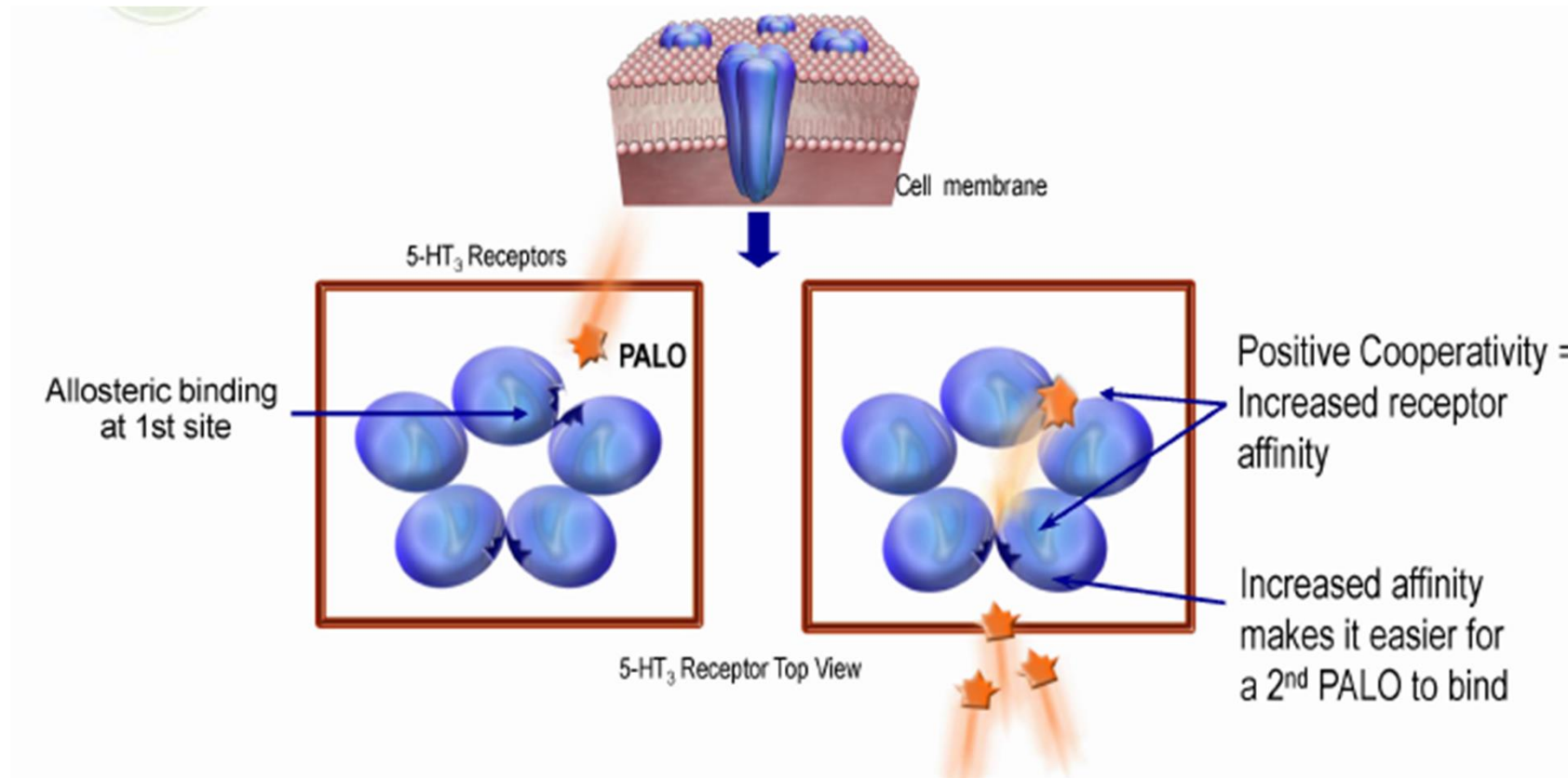
■ What is Palonosetron?

1. Palonosetron HCl has **stronger receptor affinity** than existing formulation.

5-HT ₃ * Receptor Antagonist		Binding Affinity(pki)
Palonosetron HCl³		10.45
Old Generation	Granisetron ³	8.91
	Ondansetron ³	8.39
	Ramosetron ⁷	8.60

■ What is Palonosetron?

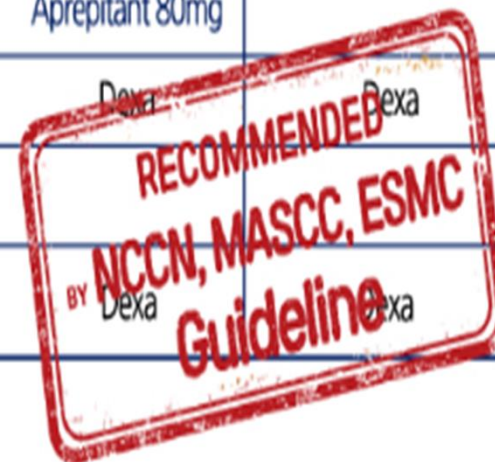
2. Palonosetron HCl has serotonin binding blockade and strong receptor affinity due to allosteric binding.



■ What is Palonosetron?

3. Palonosetron HCl is recommended as first line treatment for Anti-Emetic agent by NCCN/MASCC/ESMO Guideline.

	D1	D2	D3	D4
High Emetogenic Chemotherapy	Palonosetron HCl 0.25mg			
	Aprepitant 125mg	Aprepitant 80mg	Aprepitant 80mg	
	Dexa	Dexa	Dexa	Dexa
Moderate Emetogenic Chemotherapy	Palonosetron HCl 0.25mg			
	Dexa	Dexa	Dexa	Dexa



NCCN (National Comprehensive Cancer Network)
 MASCC (Multinational Association of Supportive Care in Cancer)
 ESMO (European Society for Medical Oncology)

THANK YOU