# EFFICIENCY OF A PROTOCOL TO PREVENT DELAYED CHEMOTHERAPY-INDUCED EMESIS CP-058

S. Fenix-Caballero, C. Martinez-Diaz, M.A. Blanco-Castaño, E.J. Alegre-Del Rey, M.J. Gandara-LadronDeGuevara, C. Palomo-Palomo, J.C. GarciadeParedes-Esteban, J. Diaz-Navarro, E. Rios-Sanchez, J.M. Borrero-Rubio.

## Puerto Real Universitary Hospital

# **BACKGROUND**

**Delayed-chemotherapy-induced nausea and vomiting (dCINV)** are common adverse events and appear within 24h after receiving **highly emetogenic drugs**: cisplatin-cyclophosphamide-doxorubicin

Antiemetic guidelines recommend APR to prevent dCINV.

#### However, authors had not considered:

- Two-drug combination (DEX+MET) as standard treatment in previous versions
- No study had compared APR with the previous two-drug combination deemed valid by authors themselves.

**PURPOSE** 

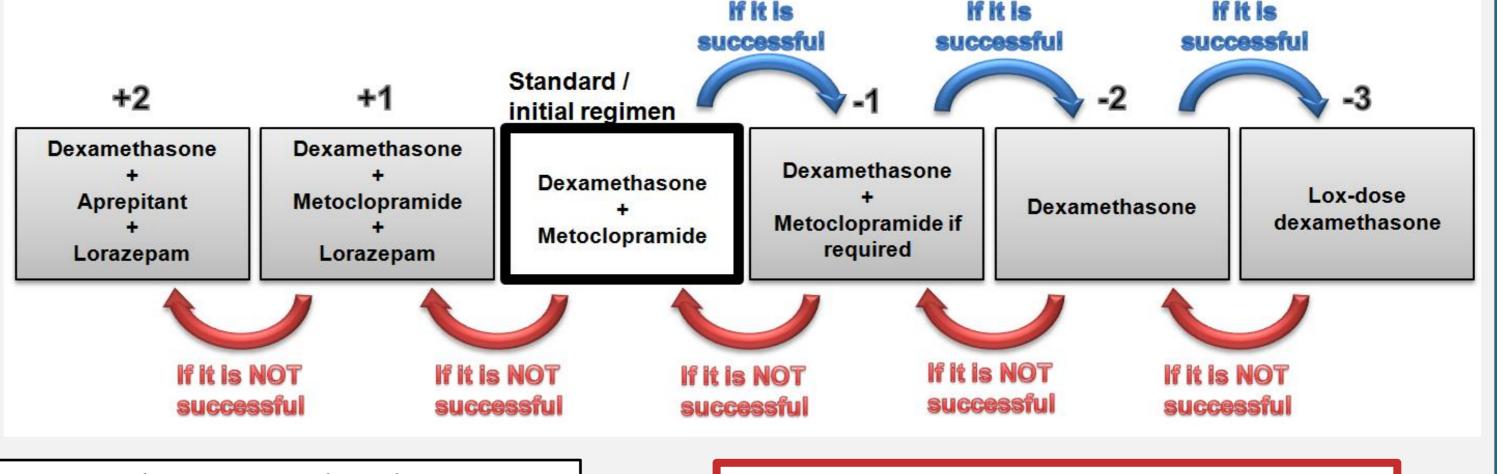
To assess the efficiency of a dCINV-prophylaxis protocol on patients of high risk of emesis.

### **MATERIALS AND METHODS**

A protocol/algorithm based on available published trials was designed. This algorithm was applied according to each patient needs and was part of pharmatherapeutical monitoring.

Complete
Response (CR)

no emetic
episodes within 5
days after the
chemotherapy.



- Number of patients achieving CR with each regimen
- Economic costs associated with dCINV prophylaxis

These results were compared with those that would have obtained if all the patients had received APR.

# **RESULTS**

**256 patients** (2.5-years period)

About **91.8%** of patients achieved CR with **standard-regimen** or less intensive treatment.

Anti-nausea regimen			Cost / patient	Patients with CR	treatment for all patients
+2	APR+DEX+ LOR	APR (125mg day 1; 80mg days 2-3) + DEX (4mg days 2-3 BID; 2mg days 4-5 BID) + LOR (0,5-1mg BID days 2-3)	58.53€	11 (4.3%)	643.83 €
+1	DEX+MET +LOR	DEX (8mg days 2-3 BID; 4mg days 4-5 BID) + MET (20mg TID days 2-5) + LOR (0,5-1mg BID days 2-3)	4.18 €	10 (3.9%)	41.80 €
Standard	DEX+MET	DEX (8mg days 2-3 BID; 4mg days 4-5 BID) + MET (20mg TID days 2-5)	4.13 €	89 (34.8%)	367.57€
-1	DEX+MET if required	DEX (8mg days 2-3 BID; 4mg days 4-5 BID) + MET (20mg TID days 2-5 only if nausea/vomiting)	4.13 €	65 (25.4%)	268.45 €
-2	DEX alone	DEX (8mg days 2-3 BID; 4mg days 4-5 BID)	3.20€	39 (15.2%)	124.80€
-3	Low-dose DEX	DEX (4mg days 2-3 BID; 2mg days 4-5 BID)	2.46 €	42 (16.4%)	103.32 €
					1540 77.6

If all the patients had received APR

14983.68 €

Estimated saving 89.66% 103.32 €

103.32 €

1549.77 €

# CONCLUSIONS

Only a small percentage of patients needed aprepitant to prevent dCINV.

Total costs of dCINV prophylaxis based on the proposed algorithm will be one tenth of the cost of APR-based regimen