

THE IPILIMUMAB DRUG DAY: AN INSTRUMENT TO CONTAIN COSTS

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BACKGROUND

The great innovation of Ipilimumab (in Italy since 2013) is accompanied by high cost that it heavily influences Italian-NIH resources

PURPOSE

In order to contain Ipilimumab's costs, our hospital has established the Drug-Day, which means to concentrate in a single day all patients who receive the same drug.

May 2013: Ipilimumab arrives in Italy, it has a high cost

Ipilimumab has only 24h of stability. Unfortunately the HPLC studies to grow the stability were unsuccessful

The Drug-Day could be the solution!!!!

MATERIALS and METHOD

With the collaboration of Oncological-Immunotherapy department, we organized two consecutive Drug-Day (Thursday-Friday) and the 21days-cycle of Ipilimumab protocol helps us to schedule by time each administration, to avoid waste of drug.

RESULTS

Advantages

The first day when we had prepared Ipilimumab (3th May 2013), three patients were scheduled. The total day-dose was 693mg, then we used 2 vials of 50mg and 3 vials of 200mg. If we had had patients on different days, we would have used 6 vials (750mg) instead of the 700mg that we really used, we have saved 1 vial of 50mg that it cost 2.953€.

Disadvantages

The short stability of Ipilimumab (24h after reconstitution) restrict the potential of Ipilimumab Drug-Day. An example: in 5th and 6th December 2013 we had two patients for day that received the same dose (453mg). If we had had the possibility to use the rest of previous day we would have saved, in two days at least 1 vial of Ipilimumab 50mg.

PATIENTS	Dose mg	Theoretical Consumption		Tot mg	Used Package		Saved Package		Spare
		Yervoy 50mg	Yervoy 200mg		Yervoy 50mg	Yervoy 200mg			
1	294,00	2	1	693,00	2	3	1	0	7mg
2	180,00		1						
3	219,00	1	1						

PATIENTS	Dose mg	Date	Consumption Theoretical			Used Package		Saved Package		Spare
			Yervoy 50mg	Yervoy 200mg	Tot. Mg	Yervoy 50mg	Yervoy 200mg			
19	225,00	05/12/13	1	1	453,0	2	2	0	0	47mg
22	228,00	05/12/13	1	1						
18	225,00	06/12/13	1	1	453,0	2	2	0	0	47mg
25	228,00	06/12/13	1	1						

CONCLUSION

Since the introduction of Yervoy in our hospital, until the end of 2013, we treated 27 patients, for an amount of 90 administrations, concentrated in 40 Drug-day. Through this organization we could save 70,884 €

		Cost per mg	Total cost
Theoretical mg	21.150,00	59,07	€ 1.249.331
mg used	19.950,00	59,07	€ 1.178.447
Difference	1.200,00	59,07	€ 70.884

The system could be further improved if patients in the area of our hospital, have undergone their blood tests, on Thursday, and then on Friday they would receive the drug-administration (preparation at around 9:00 am), this would allow us to move within 24h-stability thus allowing the reuse of vials used on Thursday (prepared at around 12:00 am).