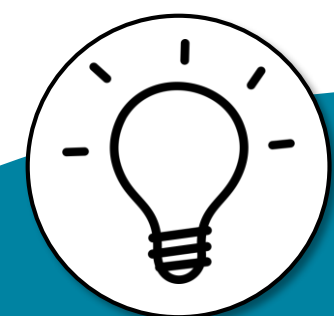


Sustainability initiative: Dose banding of paclitaxel to minimise drug waste

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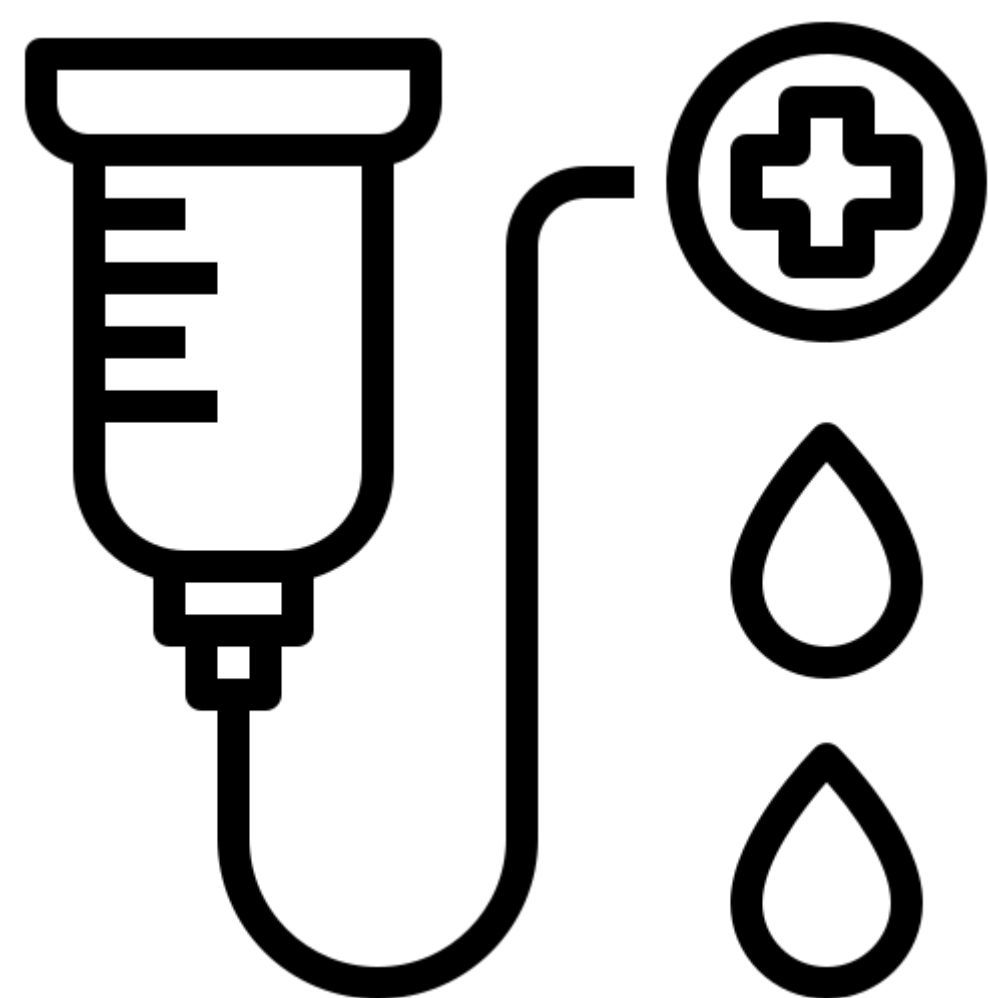
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WHAT WAS DONE?

- ✓ Paclitaxel fixed dose-bands.
- ✓ For patients treated with a weekly dose of 80mg/m².



HOW WAS IT DONE?

- ✓ Prescribers & pharmacists.
- ✓ Paclitaxel **dose-bands** were created.
- ✓ Implementation as **dose-rounding rules** (Hix 6.2, ChipSoft BV).
- ✓ Maximum deviation of the prescribed dose: **10%**.
- ✓ Dosage ≤72 mg or >200 mg were rounded as normal.

Prescribed dose (mg)	Dose-band (mg)	m ²
>72 ≤88	78	1.0
>88 ≤102	96	1.2
>102 ≤116	114	1.4
>116 ≤136	126	1.6
>136 ≤152	144	1.8
>152 ≤168	162	2.0
>168 ≤184	174	2.2
>184 ≤200	192	2.4

WHY WAS IT DONE?

- ✓ Reduce paclitaxel **waste** caused by cancellation of administrations.
- ✓ Increase **interchangeability** of already reconstituted paclitaxel bags (shelf-life 7 days after reconstitution).
- ✓ Saving **waste** of drugs and material.
- ✓ Reducing **costs** of drug, material and manpower.

WHAT HAS BEEN ACHIEVED?

- ✓ Implementation on 01-04-2022.
- ✓ Results from: 01-05-2022 until 31-12-2022.
- ✓ Compared with: 01-05-2021 until 31-12-2021.
- ✓ Improved **interchangeability** of prepared dosages.
- ✓ Less waste:: **3.7 fold increase of reuse.**

	2021	2022
# infusions	1829	1589
# of different dosages	30	16
Top 3 dosages	144 mg (16%) 162 mg (11%) 138 mg (10%)	144 mg (33%) 162 mg (22%) 126 mg (22%)
Reused infusions/ discarded infusions	12/67 (18%)	27/41 (66%)
Waste of total prepared infusions	3%	0.9%

WHAT'S NEXT?

- ✓ Pharmacists **adapting the rounding rules**, decreasing the variation in doses and thus waste.
- ✓ Dose-bands were implemented together with other waste/cost reducing changes.
- ✓ Monitoring and evaluation together with prescribers.
- ✓ Aiming to implement **other dose-bands**:
 - ✓ Paclitaxel dosages 175mg/m²
 - ✓ Chemotherapeutic drugs (e.g. oxaliplatin, docetaxel, cyclophosphamide).

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Elise Smolders has no conflicts of interest

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