

# Chronische postoperatieve en traumawonden

## “acute chronische wonden”



APRIL23

Harm Jaap Smit

# Kennis maken

- Moleculair bioloog / BioMedServ BV
- Coloplast (1996), TheWoundCareCompany, Taureon.
- Docent wondverpleegkunde & wondconsulent Erasmus
- Expert team Wondplatform
- Editorial board: Journal of Wound Care, Wound Masterclass
- Disclosure:
  - advisory board: Utermohlen, Coloplast, Debx, Innova,
  - aandelen: BioMedServ BV, Icap holding BV
- Lastige vragen

Hoe dan?

# The effect of postoperative closed incision negative pressure therapy on the incidence of donor site wound dehiscence in breast reconstruction patients: DEhiscence PREvention Study (DEPRES), pilot randomized controlled trial

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## 1. Introduction

Wound dehiscence is the rupturing or splitting apart of the margins of a clean closed incision which may be partial or complete and may be superficial or may involve the deeper tissue layers [1–5]. Wound dehiscence is a serious postoperative complication with high morbidity and high mortality up to 50% [5–9] and contributes to delays in the recovery process, repeat operations, prolonged hospital stays, high care costs, and reduced ability to self-care [9].

**A**utologous deep inferior epigastric perforator (DIEP) flap breast reconstructions are increasingly popular operations in breast

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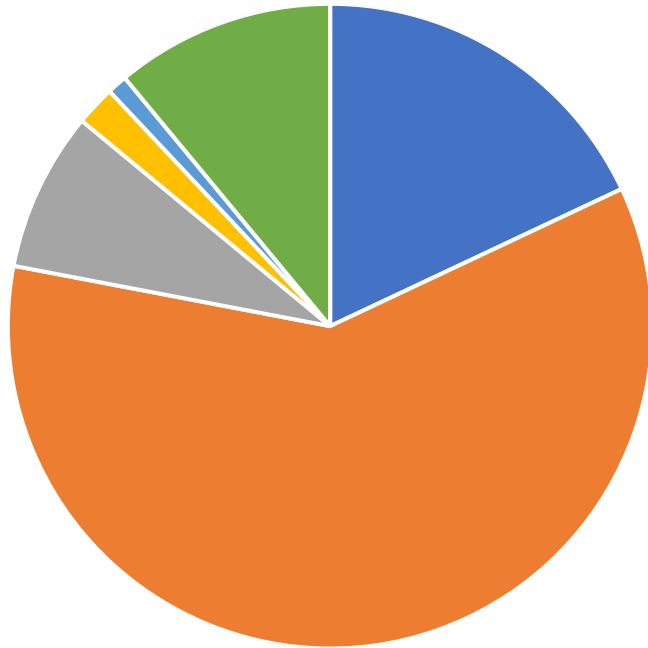
contribute to an infection. As discussed in the beginning of this article, presence of an SSI leads to a significant risk of development of both a burst abdomen and incisional hernia. Surgical site infections represent 14% of all nosocomial infections and 5% of all surgical complications (46). SSI after midline laparotomy reach up to 16%, prolonging hospital stay,

cancer patients who have undergone a therapeutic or prophylactic mastectomy.<sup>1</sup> However, abdominal donor-site wound dehiscence, which is a serious postoperative complication,<sup>2,3</sup> occurs in 7.4 to 33 percent of cases.<sup>4-6</sup>

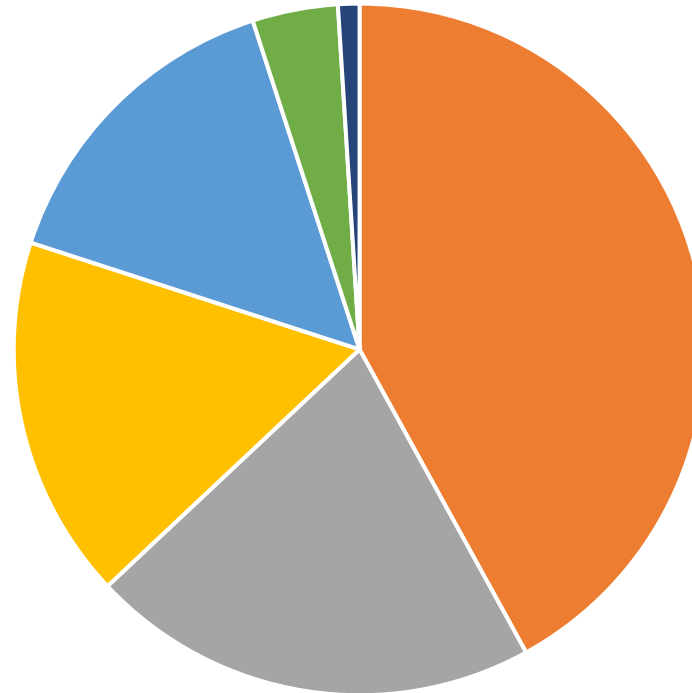
1. Muller-Sloof E, de Laat E, Kenc O, Kumas A, Vermeulen H, Hummelink S, et al. Closed-Incision Negative-Pressure Therapy Reduces Donor-Site Surgical Wound Dehiscence in DIEP Flap Breast Reconstructions: A Randomized Clinical Trial. *Plast Reconstr Surg.* 2022;150:385-475.
2. Muller-Sloof E, de Laat HEW, Hummelink SLM, Peters JWB, Ulrich DJO. The effect of postoperative closed incision negative pressure therapy on the incidence of donor site wound dehiscence in breast reconstruction patients: DEhiscence PREvention Study (DEPRES), pilot randomized controlled trial. *Journal of Tissue Viability.*
3. Theodorou A, Banysch M, Gok H, Deerenberg EB, Kalff JC, von Websky MW. Don't fear the (small) bite: A narrative review of the rationale and misconceptions surrounding closure of abdominal wall incisions. *Front Surg.* 2022;9:1002558 2018:0-1.

# Wat gebeurt er in Nederland

diagnose huisarts

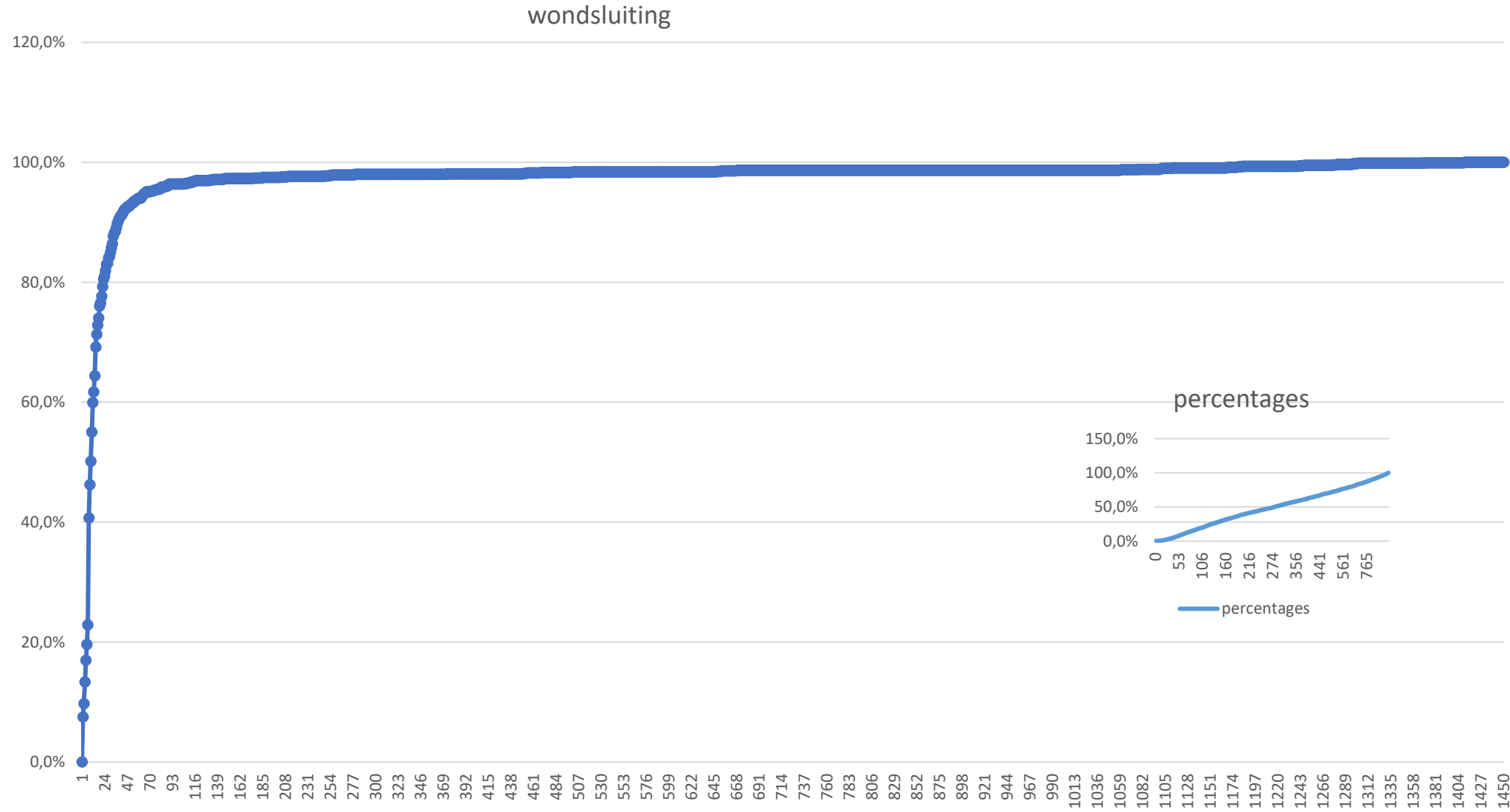


diagnose gespecialiseerde thuiszorg

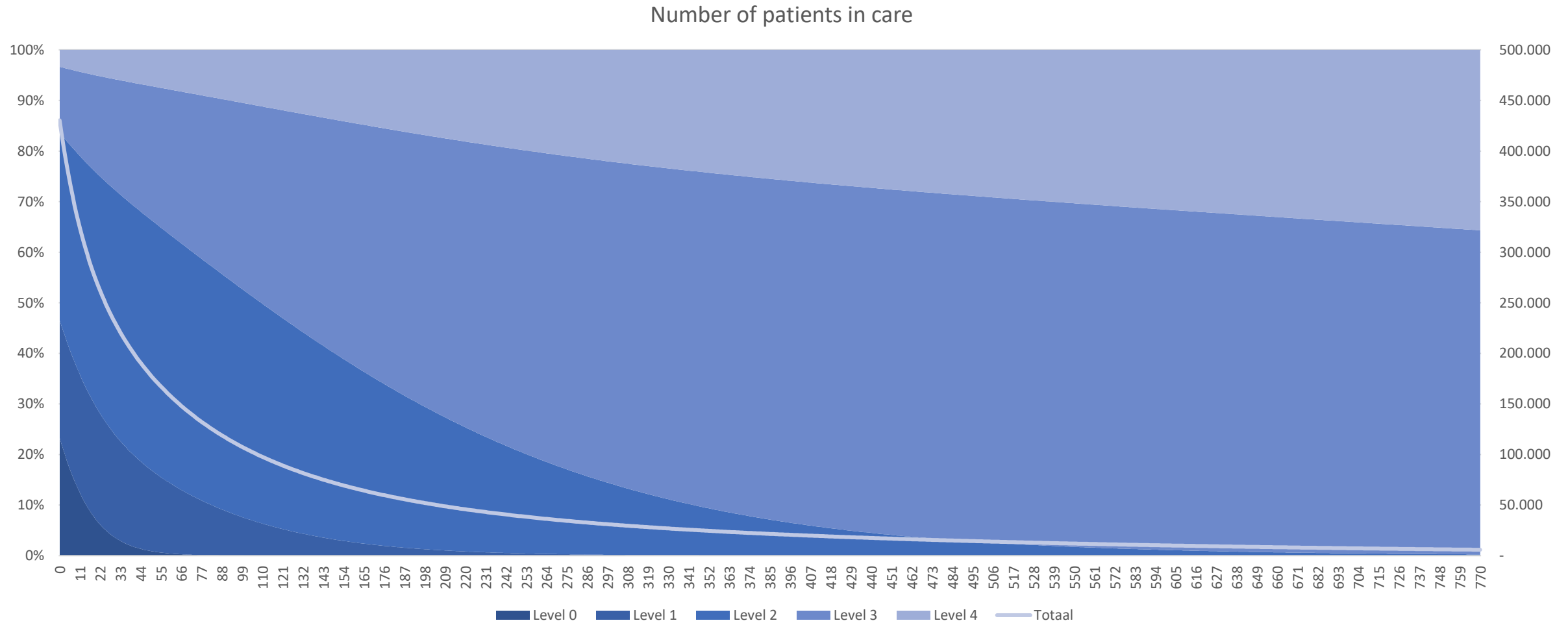


- overig
- trauma / postop
- been ulcera
- decubitus
- diab voet

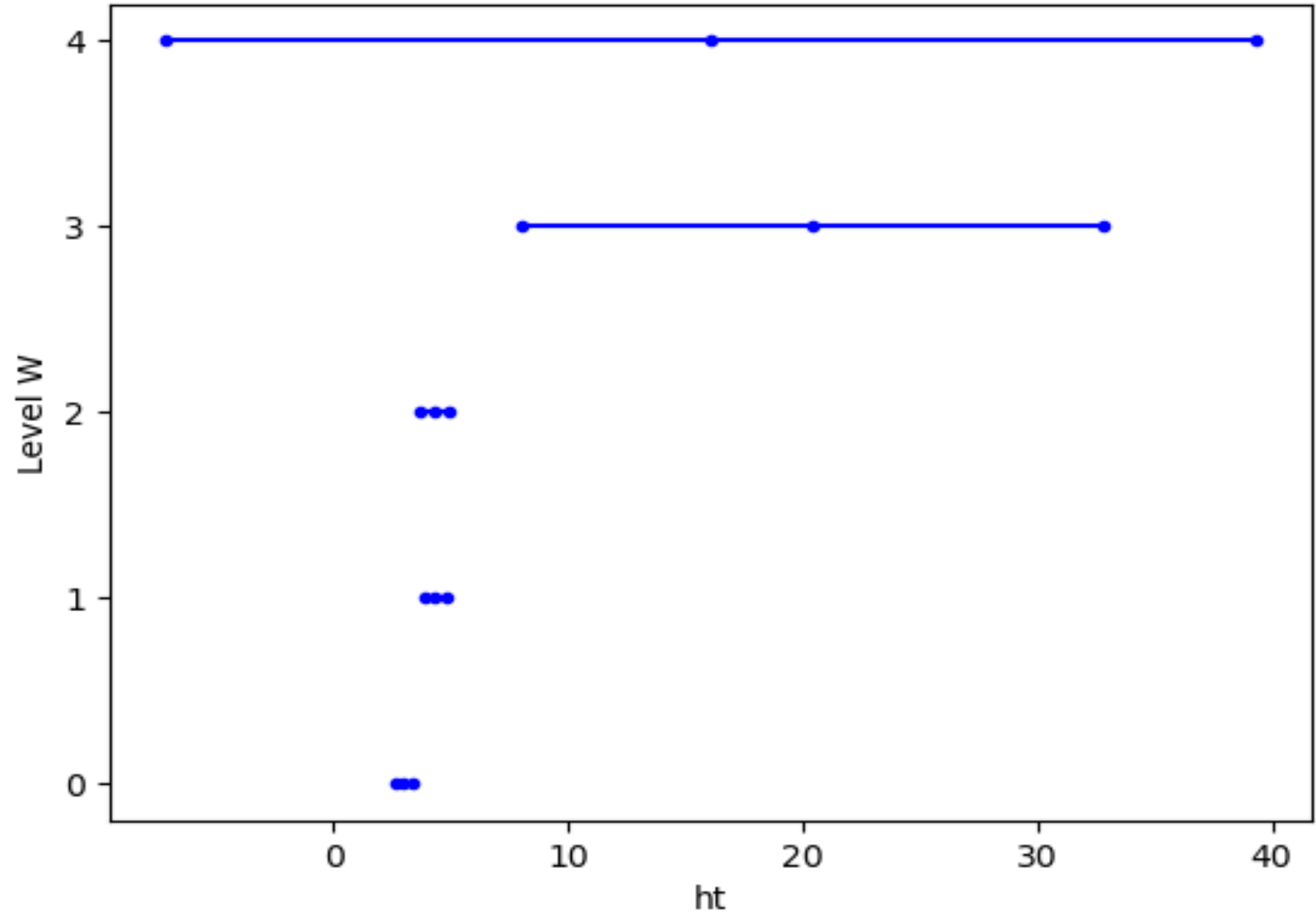
# Sluiting in de tijd



# De samenstelling van de patiëntengroep veranderd naarmate de wonden langer open zijn.

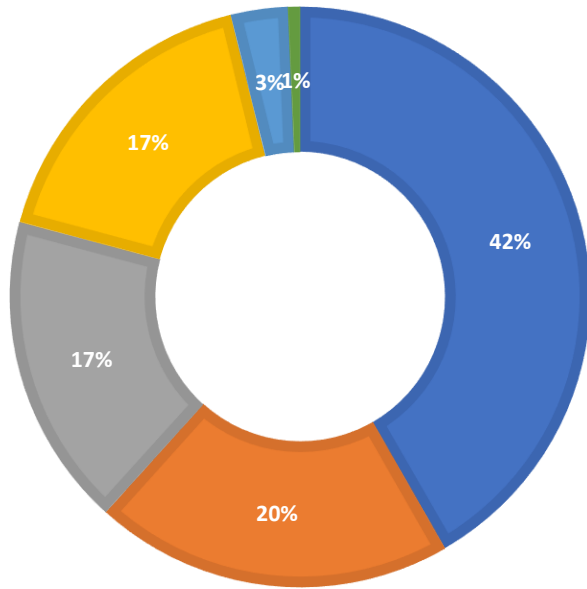


# Sluitingssnelheid per level

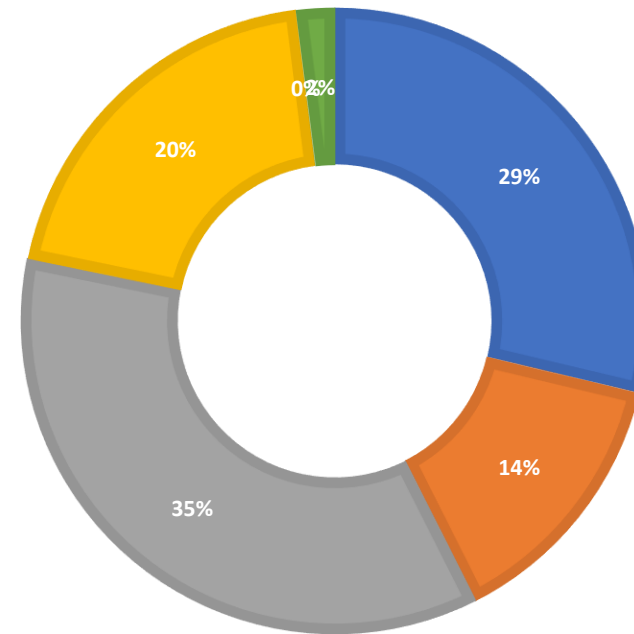




7 DAGEN



1JAAR



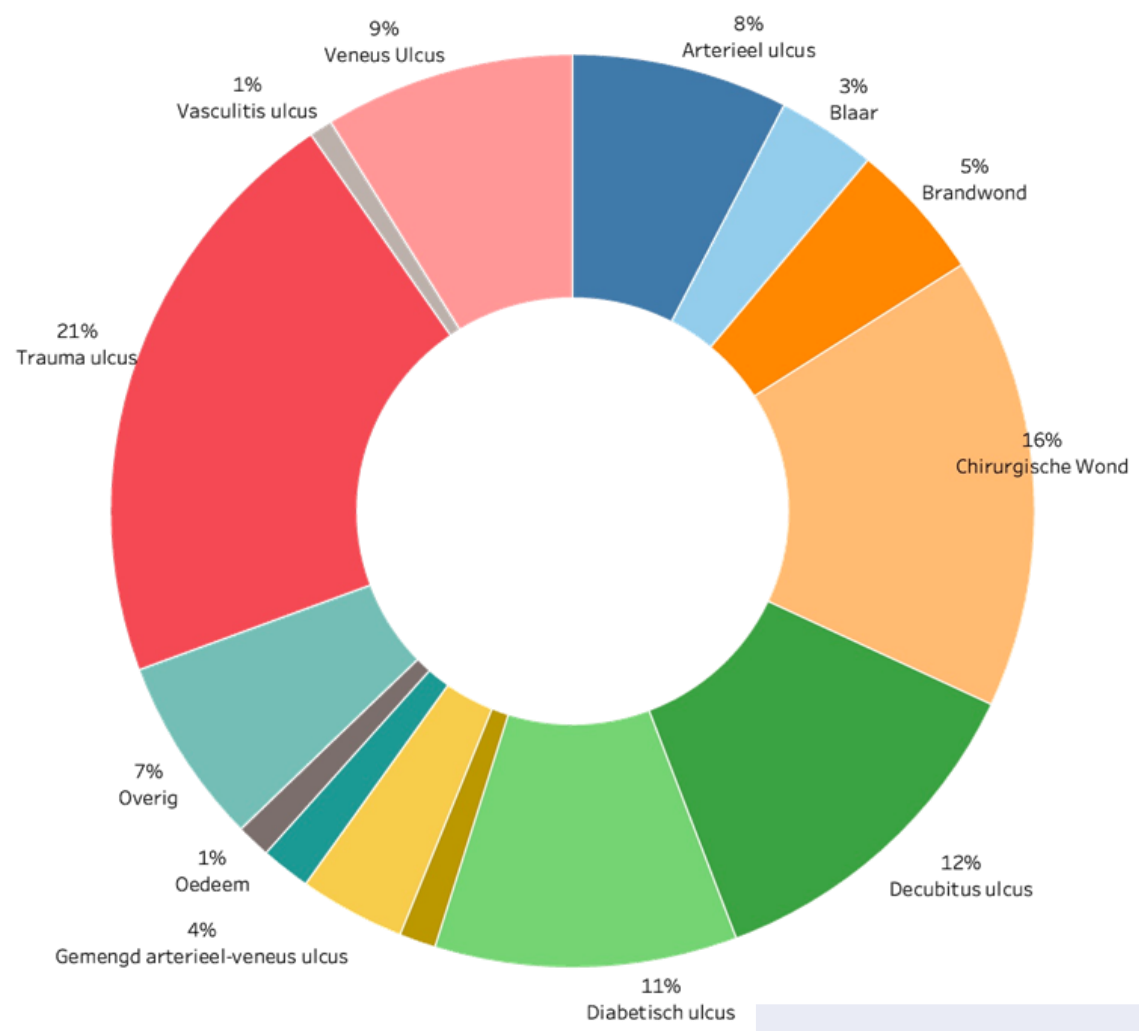
- Post traumatic/surgical wound
- Pressure ulcer
- Diabetic foot ulcer
- Leg ulcer
- Burns
- Malignant oncologic

|                               | 7_days | 365_days | %     |
|-------------------------------|--------|----------|-------|
| Post traumatic/surgical wound | 972    | 29       | 3,0%  |
| Pressure ulcer                | 466    | 14       | 3,0%  |
| Diabetic foot ulcer           | 407    | 36       | 8,8%  |
| Leg ulcer                     | 397    | 20       | 5,0%  |
| Burns                         | 74     | 0        | 0,0%  |
| Malignant oncologic           | 15     | 2        | 13,3% |

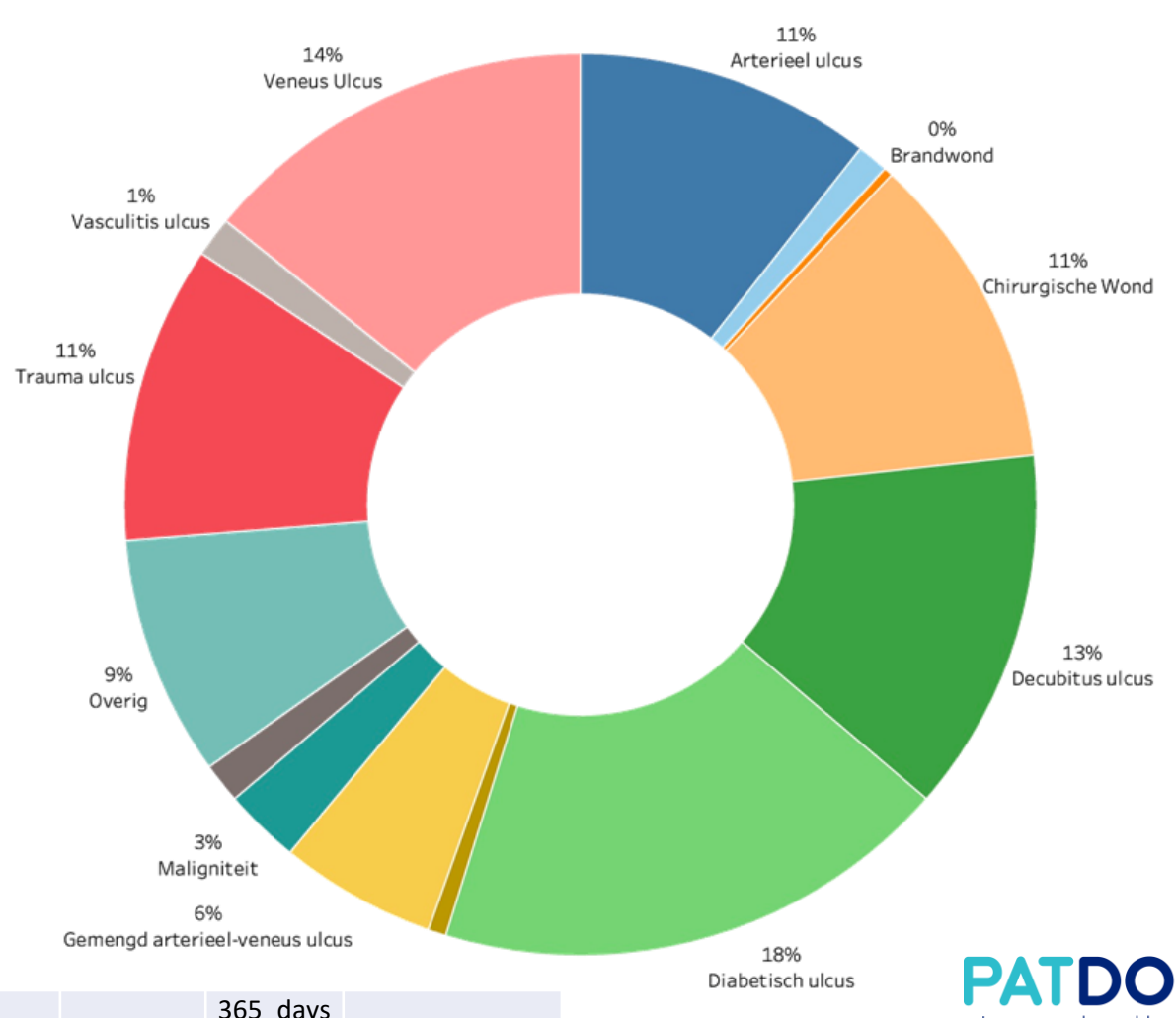
Diagnose

- Arterieel ulcus
  - Blaar
  - Brandwond
- Chirurgische Wond
  - Decubitus ulcus
  - Diabetisch ulcus
- Erysipelas
  - Gemengd arterieel-veneus ulcus
  - Maligniteit
- Oedeem
  - Overig
  - Trauma ulcus
- Vasculitis ulcus
  - Veneus Ulcus

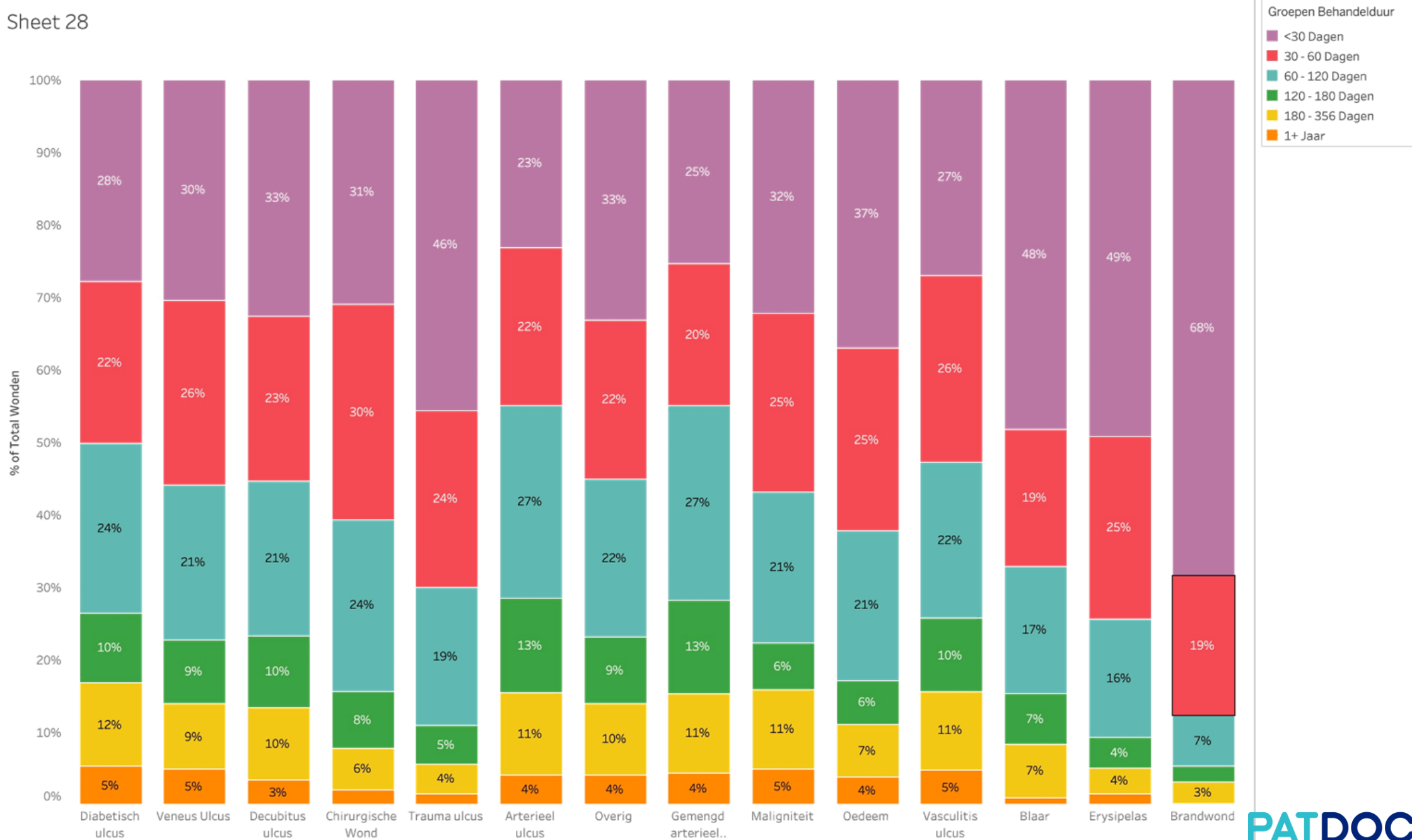
Totaal



1+ Jaar



|                               |     |          |  |
|-------------------------------|-----|----------|--|
|                               |     | 365_days |  |
| Post traumatic/surgical wound | 37% | 22%      |  |



# Indeling wonden kan veel eenvoudiger!

Er zijn maar **twee** soorten en **twee** uitzonderingen

Je hebt een wond omdat:

1. Omdat je iets overkomt (acuut).
2. Omdat je een probleem hebt (hopelijk niet chronisch).

Uitzonderingen:

1. De wond is groot en zit op een verkeerde plek.
2. Door de wond ontdek je dat je een probleem hebt.



# Postoperatieve problemen kennen een aantal oorzaken

| Patient related                    | Surgeon/technique related | Material related |
|------------------------------------|---------------------------|------------------|
| Obesity                            | Incision site             | Suture material  |
| Smoking                            | Incision technique        |                  |
| Diabetes                           | Suture technique          |                  |
| Collagen deficiency                | Wound contamination       |                  |
| Immunosuppression                  | Postoperative Management  |                  |
| Nutritional deficiency             | Skin closure              |                  |
| Clinical condition (sepsis, shock) | NPWT application          |                  |

## Technique related factors

1. Continuous vs. interrupted suture
2. Suture length to wound length ratio
3. Bite size
4. Mass closure vs. aponeurosis only
5. Tension

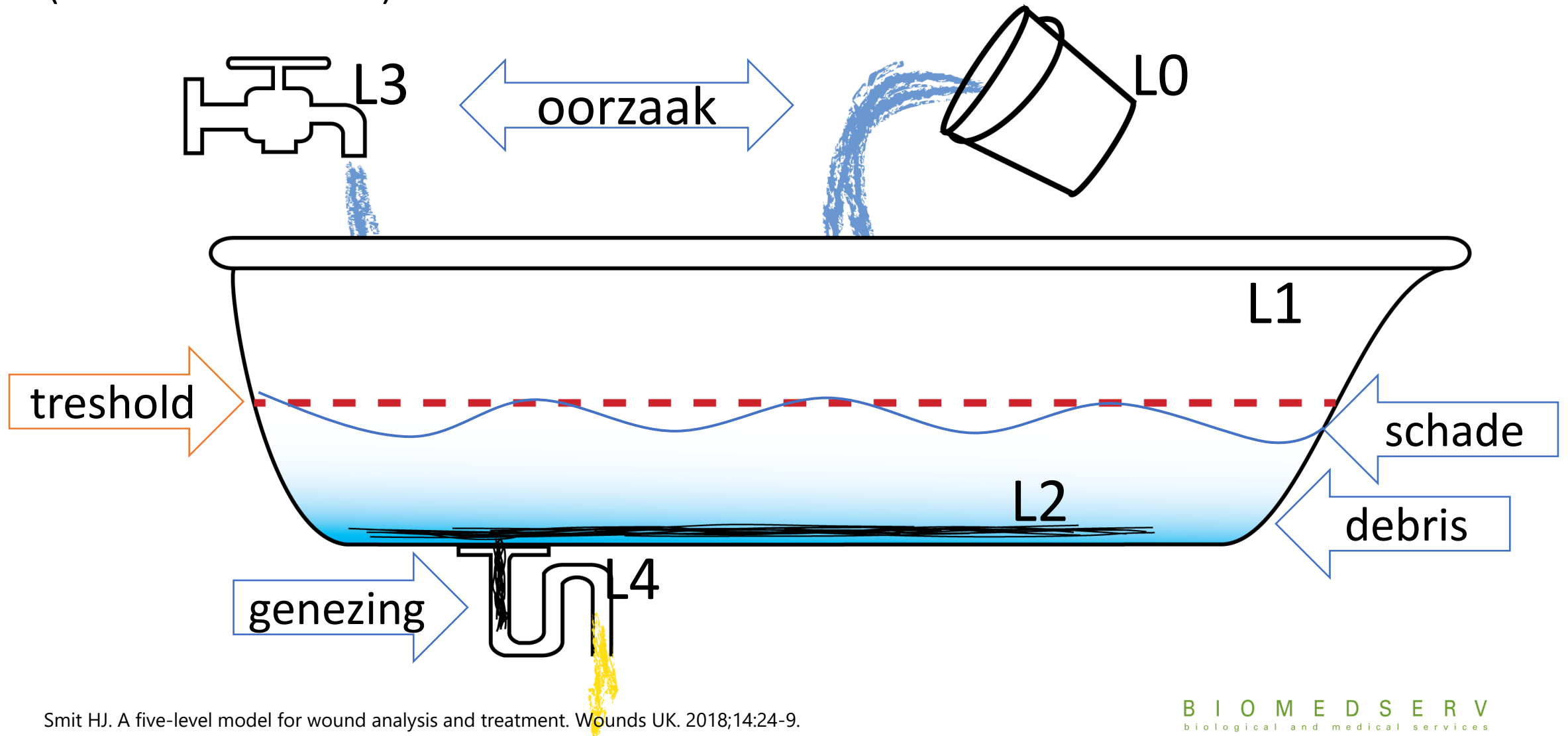
## Material related factors

- i. Needle size
- ii. Absorbable vs non Absorbable
- iii. Antibacterial coated/non coated
- iiii. Monofilament vs. multifilament


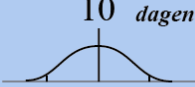





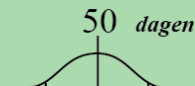













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# Badkuipmodel wondbehandeling

(water=schade)



# Patient work up

|   |  |  |   |                  |
|---|--|--|---|------------------|
| 0 |   <p>10 dagen</p>      | NAW (postcode!), geslacht, leeftijd, locatie, duur, T½, Altis (I)  |    | Aarde            |
| 1 |   <p>30 dagen</p>      | <b>SCEGS</b> , gezondheidsvaardigheden/mogelijkheden, partner/mantelzorg, SNAQ-voeding, comorbiditeit, Altis (II), lab (glucose, HbA1c, nierfunctie, HB, cholesterol, CRP en leucocyten), medicatie (Start/stopp, corticosteroiden, biologicals), fitheid/conditie (beweging). (driving the bus) |    | Samenleving      |
| 2 |   <p>50 dagen</p>      | Debridement, TIME, compartimenten, kweek.  |    | Sociale omgeving |
| 3 |   <p>190 dagen</p>   | Cardiovasculair, vaatstatus, nierfunctie, endocrinologieglucose regeling, neuropathie, mobiliteit, oncologie, huidaandoeningen,...   |    | Patiënt          |
| 4 |   <p>260 dagen</p> | Complement, inflammatie, fasen wondgenezing, MMP's/TIMP's, familiere toets.  |    | Orgaanstelsels   |
|   |  |  |    | Organen          |
|   |  |  |    | Weefsels         |
|   |  |  |  | Cellen           |
|   |  |  |  | Organelen        |
|   |  |  |  | Moleculen        |
|   |  |  |  | Atomen           |





EINDE