



BD Instaflash™ Needle Technology

Enhancing first attempt insertion success rate for peripheral intravenous cannulation¹

Up to 80 % of hospitalized patients receive a peripheral IV cannula².
In some patients, vascular access can be challenging:



Lack of visible, palpable veins³

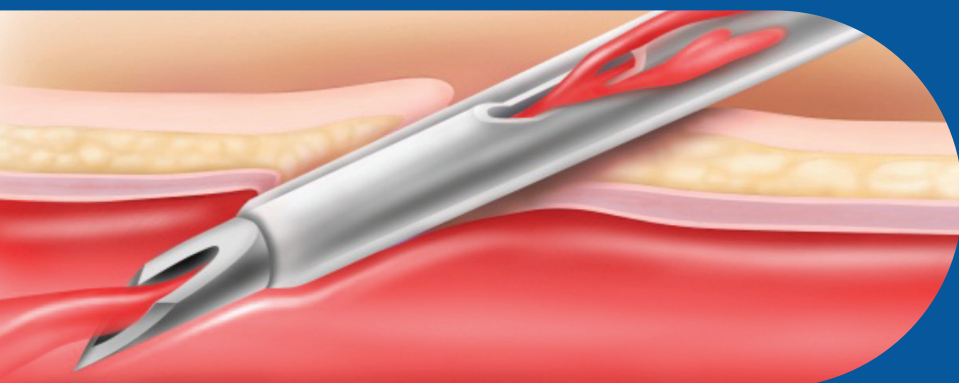


Smaller veins³



History of difficult intravenous access³

When time is of the essence, could the faster visualization of flashback*, provided by BD Instaflash™ Needle Technology, lead to a higher rate of first attempt insertion success?



Two studies^{1,3} aimed to

Compare a catheter with a notched needle (BD Instaflash™ Needle Technology) to a catheter without a notched needle to understand whether this needle technology could increase first attempt insertion success.



* compared to a non-notched needle



STUDY ONE¹

Intervention group 328 patients

BD Venflon™ Pro Safety Needle
Protected IV Cannula with
BD Instaflash™ Needle Technology
(notched needle)



Control group 330 patients

BD Venflon™ Pro Safety
Needle Protected IV Cannula
(non-notched needle)

**Evidence shows that first
attempt insertion success
was significantly higher
with BD Instaflash™
Needle Technology^{1*}**

85%

The first attempt insertion success rate in the group with BD Instaflash™ Needle Technology (85%), compared with the control group (79%)¹.

29%

In patients who were at risk of failed cannulation, first attempt insertion success was higher with BD Instaflash™ Needle Technology (29%), when compared with the control group (10%), was not statistically significant¹.

Considerations when choosing a peripheral intravenous catheter

- A simple switch to a notched needle could increase first attempt insertion success for your patients^{1*}.
- Using a notched needle could be particularly beneficial for those patients who are at high risk of failed cannulation¹. Not statistically significant.
- Increasing first attempt insertion success rates may potentially improve patient satisfaction, turnover and throughput in the hospital¹.

Study Limitations

Single center study. Included only adult patients in the pre-operative holding area. Blinding was not possible as it was obvious during insertion as to which catheter had BD Instaflash™ Needle Technology.

* compared to a non-notched needle





STUDY TWO³

Intervention group 701 patients

BD Venflon™ I IV Catheter with
BD Instaflash™ Needle Technology
(notched needle)



Control group 701 patients

BD Venflon™ IV Catheter
(non-notched needle)

**First attempt insertion
success was significantly
higher with BD Instaflash™
Needle Technology^{3*}**

98.7%

first attempt insertion
success rate in the group
with BD Instaflash™
Needle Technology³.

88.8%

first attempt insertion
success rate in the
control group³.

Considerations when choosing a peripheral intravenous catheter

- A simple switch to a notched needle may increase first attempt insertion success for your patients³.
- Minimizing the number of insertion attempts may result in a reduction of patient treatment costs and potentially improve patient and clinician satisfaction³.

Study Limitations

Study included only adults. Detailed analysis of catheter characteristics and associated complications was not studied and might affect overall efficiency of first insertion success of the BD Venflon™ I IV Catheter.

* compared to a non-notched needle



References

1. van Loon FHJ, Timmerman R, den Brok GPH, Korsten EHM, Dierick-van Daele ATM, Bouwman ARA. The impact of a notched peripheral intravenous catheter on the first attempt success rate in hospitalized adults: block-randomized trial. *JVA*. 2021. DOI: 10.1177/1129729821990217
2. Alexandrou E, Ray-barruel G, Carr PJ, et al. International prevalence of the use of peripheral intravenous catheters. *J Hosp Med*. 2015;10(8):530-3.
3. Seetharam AM, Raju U, Suresh K. A randomized controlled study to compare first stick success with Instaflash technology: The FIRSST study. *J Vasc Access* 2022;1-7. doi: 10.1177/11297298221080369



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