

# The effect of inhibitors on quality of life and pain in adult patients with severe haemophilia in the PROBE cohort

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## INTRODUCTION

- The development of anti-factor VIII inhibitors poses a significant additional burden to people with severe hemophilia A (PWsHA).

## OBJECTIVE

- To describe the effect of inhibitors on the quality of life (QoL) and reporting of pain in PWsHA and PWsHA with a current inhibitor.

## METHODS

- This analysis utilized data from the PROBE (Patient Reported Outcomes, Burdens and Experiences) study.
- Participants with No Bleeding Disorder (NOBD), PWsHA, and PWsHA with a current inhibitor were compared.
- QoL was measured with EQ-5D and VAS.
- Descriptive analyses and logistic regression adjusted for age, mobility, presence of other pain, use of pain medication, and reporting of other health problems were used.
- Standard t-tests and chi squared tests were conducted to test for between-group differences.

## RESULTS

- 798 male patients, aged 11-81 were analyzed.
- 174 (22%) NOBD, 582 (73%) PWsHA and 42 (5%) PWsHA with a current inhibitor.
- PWsHA and PWsHA with a current inhibitor did not differ for bleeding rates, presence or number of target joints or range of motion.
- There was a statistically significant increase of reported life-threatening bleeds in PWsHA with a current inhibitor over PWsHA (40% vs 14.5 %;  $p < 0.001$ ).
- 50% of PWsHA with a current inhibitor were on intermittent or regular prophylaxis vs. 76% of PWsHA.
- All EQ-5D domains were different ( $p < 0.001$ ) except Anxiety/Depression between PWsHA and PWsHA with a current inhibitor ( $p = 0.317$ ).
- The strongest interference of acute pain was found for walking ability ( $p = 0.026$ ) and sleep ( $p = 0.056$ ); for chronic pain it was normal work ( $p = 0.013$ ) and sleep ( $p = 0.090$ ), without differences among subgroups.

Table 1. EQ-5D, Acute pain and Chronic pain in participants

	NOBD (95% C.I.)	PWsHA (95% C.I.)	PWsHA with inhibitors (95% C.I.)	p
EQ-5D	0.937 (0.922-0.953)	0.726 (0.702-0.749)	0.556 (0.466-0.646)	<.001
Acute pain	34%	71%	93%	<.001
Chronic pain	29%	72%	90%	=.009

- Abbreviations:** NOBD; participants with no bleeding disorders, PWsHA; people with severe hemophilia A

Table 2. Logistic regression analysis in participants reporting acute and chronic pain

	NOBD (95% C.I.)	PWsHA (95% C.I.)	PWsHA with inhibitors (95% C.I.)
Acute pain	1	2.63 (1.54-4.45)	7.37 (1.98-27.45)
Chronic pain	1	7.26 (4.09-12.91)	25.86 (6.57-101.79)

- Abbreviations:** NOBD; participants with no bleeding disorders, PWsHA; people with severe hemophilia A

## CONCLUSIONS

- PWsHA with a current inhibitor in the PROBE cohort have a lower QoL, and more chronic and acute pain.
- The difference is not explained by bleeding, target joints or functional impairment.

## REFERENCES

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