



IMPACT ON PAIN AND ACTIVITIES OF DAILY LIVING AFTER SWITCHING TO EMICIZUMAB: INSIGHTS FROM PROBE

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INTRODUCTION

Emicizumab for treatment of people with severe hemophilia A (SHA) was recently approved by Health Canada. A prospective observational study was initiated to evaluate the efficacy of emicizumab and assess health-related quality of life (HRQoL) utilizing the PROBE questionnaire.

METHODS

HRQoL outcomes were collected using the Patient Reported Outcomes Burdens and Experiences (PROBE) questionnaire.

- Eight male SHA (median age 22.5, range 17-55 years) completed PROBE pre- and ≥ 10 months post-switching to emicizumab.
- Acute and chronic pain occurrence (recall: 12 months) were assessed during 8 activities (walking, stair climbing, nighttime, resting, weight bearing, playing, after falling/trauma, other).
- Pain interference was assessed for 11 aspects of life (general activity, walking ability, normal work, attending school, relations with others, sleep, enjoyment of life, playing/participating in sports/exercising, lifting, other).
- PROBE includes a 24-item activities of daily living (ADL) list; current difficulty is reported. Descriptive statistics present results for pain outcomes and difficulty with ADLs.

RESULTS

- The number of individual participants reporting any acute pain, chronic pain, and ADL impairment was reduced post switch (7 [87.5%] to 4 [50.0%], 5[62.5%] to 4 [50%], 8 [100%] to 3 [37.5%], respectively). (Data not shown)
- Overall switching demonstrated a positive effect on self-reported acute and chronic pain occurrence. Post-switch, those reporting acute pain indicated “yes” to the occurrence of pain in 8 scenarios across 8 activities, compared with 22 across the activities pre-switch. (Table 1) Chronic pain was similarly reduced from 20 to 7. (Table 2)
- Acute pain was eliminated during idle activities of “nighttime” and “resting” (3 and 2 participants reported occurrence pre-switch, respectively, 0 reported post-switch). (Table 1)
- Overall reports of acute pain interference were also reduced: there were more affirmative reports of acute and chronic pain interfering pre-switch compared to post (42 compared to 12 and 28 compared to 15, respectively). (Tables 3 & 4)
- The four most improved ADLs after switching were: getting up from sitting, playing games or participating in sport, sleeping/resting, doing heavy domestic tasks. (Data not shown)

Table 1.

	Instances of Acute Pain Occurrence								Total
	Walking	Stair-climbing	Nighttime	Resting	Weight bearing	Play Sport Exercise	After fall trauma	Other	
Pre-switch (n,%)	3 (37.5)	2 (25)	3 (37.5)	2 (25)	4 (50)	3 (37.5)	3 (37.5)	2 (25)	22
Post-switch (n,%)	3 (37.5)	2 (25)	0	0	1 (12.5)	1 (12.5)	0	1 (12.5)	8

Table 2.

	Instances of Chronic Pain Occurrence								Total
	Walking	Stair-climbing	Nighttime	Resting	Weight bearing	Play Sport Exercise	After fall trauma	Other	
Pre-switch (n,%)	4 (50)	4 (50)	2 (25)	1 (12.5)	3 (37.5)	4 (50)	2 (25)	0	20
Post-switch (n,%)	2 (25)	1 (12.5)	0	0	2 (25)	1 (12.5)	0	1 (12.5)	7

Table 3.

	Instances of Acute Pain Interference											Total
	Activity	Mood	Walking	Work	School	Relationships	Sleep	Enjoyment	Playing	Lifting	Other	
Pre-switch (n,%)	6 (75)	5 (62.5)	4 (50)	5 (62.5)	3 (37.5)	2 (25)	4 (50)	4 (50)	5 (62.5)	4 (50)	0	42
Post-switch (n,%)	2 (25)	2 (25)	2 (25)	0	0	1 (12.5)	1 (12.5)	0	2 (25)	2 (25)	0	12

Table 4.

	Instances of Chronic Pain Interference											Total
	Activity	Mood	Walking	Work	School	Relationships	Sleep	Enjoyment	Playing	Lifting	Other	
Pre-switch (n,%)	4 (50)	1 (12.5)	3 (37.5)	4 (50)	1 (12.5)	1 (12.5)	2 (25)	3 (37.5)	4 (50)	3 (37.5)	1 (12.5)	28
Post-switch (n,%)	1 (12.5)	3 (37.5)	0	3 (37.5)	0	1 (12.5)	1 (12.5)	1 (12.5)	1 (12.5)	3 (37.5)	0	15

CONCLUSIONS

PROBE demonstrated that the introduction of emicizumab was associated with a decrease in self-reported acute and chronic pain occurrence and interference, as well as reduced interference with activities of daily living.

DISCLOSURE OF INTEREST

PROBE is an independent investigator led research project.

