A PERSON-CENTERED INTEGRATED CARE PROGRAM FOR MULTIPLE SCLEROSIS PATIENTS TREATED BY FINGOLIMOD: FIRST PATIENTS' REPORTED OUTCOMES

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Background and Objective

Fingolimod is an oral therapy approved in Switzerland (in 2011) as first-line treatment in relapsing-remitting multiple sclerosis (MS). According to current recommendations, the community Pharmacy of the *Policlinique Médicale Universitaire* (Pharmacy-PMU, Lausanne, Switzerland) developed a person-centered integrated care program to optimise safety and effectiveness of *fingolimod* in MS outpatients. This pharmacist-led intervention combines motivational interviews, adherence monitoring and Risk Evaluation and Mitigation Strategies (REMS) [1]. The objective was to describe the first patients' reported outcomes of the program.

Methods

Data of patients, followed by the Pharmacy of the PMU, was collected during one year (October 2013 to October 2014) using the secured web-platform (SISPha SA). This data was derived from (*i*) patients' interviews (inclusion and follow-up) and (*ii*) electronic pillboxes.

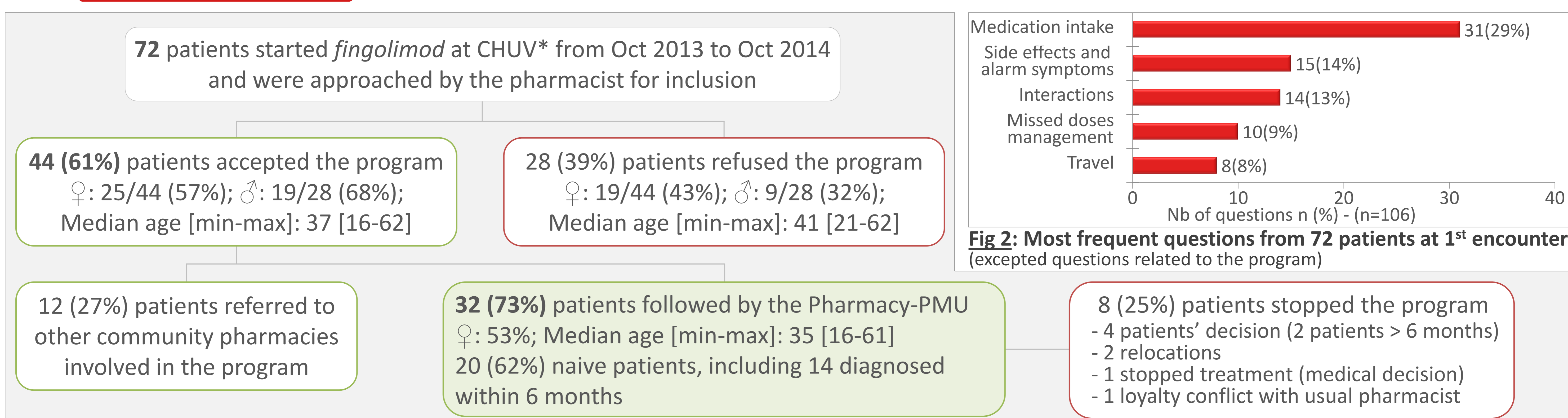## Results

72 patients started *fingolimod* at CHUV* from Oct 2013 to Oct 2014 and were approached by the pharmacist for inclusion

44 (61%) patients accepted the program
♀: 25/44 (57%); ♂: 19/28 (68%);
Median age [min-max]: 37 [16-62]

28 (39%) patients refused the program
♀: 19/44 (43%); ♂: 9/28 (32%);
Median age [min-max]: 41 [21-62]

12 (27%) patients referred to other community pharmacies involved in the program

32 (73%) patients followed by the Pharmacy-PMU
♀: 53%; Median age [min-max]: 35 [16-61]
20 (62%) naive patients, including 14 diagnosed within 6 months

8 (25%) patients stopped the program
- 4 patients' decision (2 patients > 6 months)
- 2 relocations
- 1 stopped treatment (medical decision)
- 1 loyalty conflict with usual pharmacist

Fig 1: Inclusion's program flow-chart   * CHUV: *Centre Hospitalier Universitaire Vaudois*

Fig 2: Most frequent questions from 72 patients at 1st encounter (excepted questions related to the program)

Medication intake — 31(29%)
Side effects and alarm symptoms — 15(14%)
Interactions — 14(13%)
Missed doses management — 10(9%)
Travel — 8(8%)
Nb of questions n (%) - (n=106)

The following results are based on the 32 patients of the Pharmacy-PMU (mean follow-up: 180 days/patient; total >5500 days) :

Table 1: Most frequently reported facilitators and barriers of medication intake

FACILITATORS (%**)	BARRIERS (%**)
Treatment factors	
• Nb of pill(s)/day (91%) • Schedule of medication intake (88%) • Nb of intake(s)/day (81%)	• Schedule of medication intake (19%) • Inappropriate tools to support adherence (13%) • No association with a ritual (e.g. meal) (9%)
Psycho-cognitive factors	
• Understanding of the treatment (94%) • Acceptance of the disease (78%) • No anxiety (75%)	• No goals in the treatment (38%) • Bad memory performance (16%) • Lack of motivation (13%)
Socio-economic factors	
• Social support (69%) • Lifestyle (e.g. stable employment) (56%) • Education (31%)	• Lifestyle (38%) • Lack of social support (9%) • Financial context/health insurance (9%)

** Facilitators or barriers reported for n % of patients during at least one interview

Table 2: Most frequent patients' complaints

	Nb of times reported, according the disturbing level			Nb of patients n (%)
	+	++	+++	
Fatigue	18	19	4	17(53%)
Dizziness	14	5	1	13(41%)
Headache	11	10	1	13(41%)

None — 17
<20% — 3
20-39% — 7
40-60% — 5
% of interviews (n=133)
Nb of patients

Fig 3: Patients reporting omission(s) in function of interviews (%)

Main medication adherence data:

• Persistence: 97% (31/32 patients), 1 treatment stopped due to intolerance
• 15 (47%) patients reported omission(s) (fig. 3); only one voluntary omission reported
• Average pill count adherence: 99% [95-100%]
• Average electronic adherence: 97% [87-100%]

Conclusions

These first patients' reported outcomes observed 12 months after the integrated care program started, highlight the patients' needs and bring new data about safety and use in real-life of *fingolimod*. Further in-depth adherence and effectiveness analysis, including patients followed by other community pharmacies involved in the program, will be conducted.