

A pharmacist-led interprofessional medication adherence program improved adherence to oral anticancer therapies

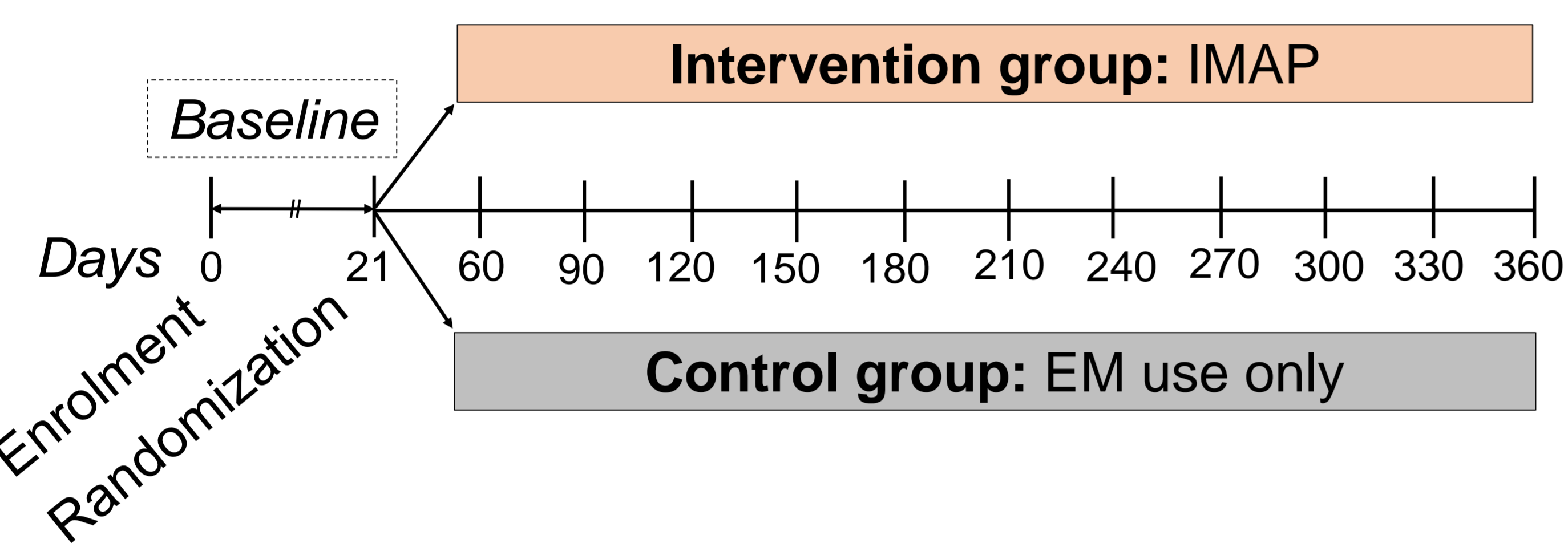
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Aim To evaluate the impact of an **interprofessional medication adherence program (IMAP)** on patients' implementation and persistence to protein kinase inhibitors (PKI) in solid cancers

Design of the OpTAT study

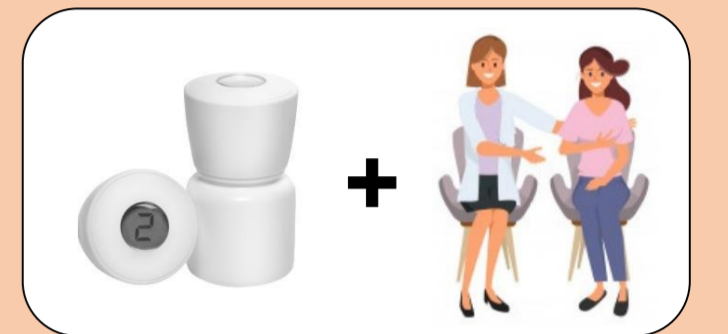
- The OpTAT study is a 1:1 randomized controlled and open trial
- Eligibility criteria: adult patients treated with PKI (cyclic or continuous regimen) for solid cancers



INTERVENTION:

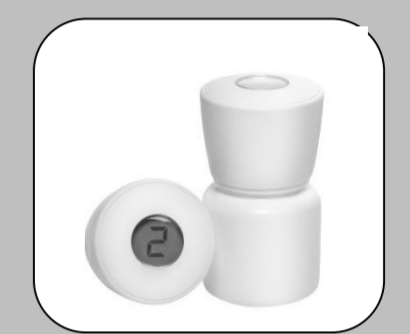
- ✓ Electronic based feedback
- ✓ Face-to-face motivational interview (Information-Motivation-Behavioural skills) between patient and pharmacist
- ✓ Adherence report describing the intervention shared with the interprofessional team

~ Once per month



CONTROL:

Use of electronic monitor (EM) only without any feedback



Methods

- Implementation is considered **optimal** if the number of observed EM opening is **at least equal** to the number of EM expected opening.
- Operational definition of implementation:** proportion of patients with an optimal implementation at each day of the monitored period.
- The EM database was **rigorously cleaned**, as the numerous PKI premature stops, altered regimens and interruptions due to intolerance or toxicity could have led to data misinterpretation.

- Implementation to PKI was compared between groups, using a **generalized estimating equation (GEE)** model.
- Relevant covariables were included in the GEE model ; age was dichotomized according to the median value in the sample size.
- Persistence** was assessed in both groups using Kaplan-Meier curves.

Results

In total, **130 patients** were included, of whom 12 left the study during the baseline period (Table 1).

Implementation

The **PKI implementation was constantly higher in intervention** (n=58) than in control group (n=60), respectively 98.1% and 94.9% at 6 months ($\Delta 3.2\%$, 95%CI: 2.6-3.7%) (Fig 1).

The intervention benefited most to (implementation at 6 months):

- Male gender:** 96.3% in the intervention and 91.0% in the control group ($\Delta 5.3\%$, 95%CI: 4.2-6.5%) (Fig 2)
- Patients **younger than 60:** 97.9% in the intervention and 93.9% in the control group ($\Delta 4.1\%$, 95%CI: 3.4-4.9%) (Fig 3)
- Patients who have never used any **adherence tools in their therapeutic journey:** 98.1% in the intervention and 94.0% in the control group ($\Delta 4.1\%$, 95%CI: 3.4-4.7%) (Fig 4).

Persistence

Persistence was comparable between intervention & control group at 6m: 91.2% and 91.7% ($\Delta -0.5\%$, 95%CI: -12.0; +11.2%).

Conclusions

The IMAP, led by pharmacists within interprofessional collaborations, **supports the implementation** to OAT. **Men, patients younger than 60 and those who have never used any adherence tools** in their therapeutic journey benefited most from the intervention. The impact on clinical outcomes has to be evaluated.

	Intervention (n=58)	Control (n=60)
Age (years), mean (CI)	60.5 (57.3-63.7)	59.6 (56.1-63.1)
Female gender, n (%)	37 (63.8)	34 (56.7)
Caucasian, n (%)	55 (94.8)	55 (91.7)
Adherence tools use, n (%)	14 (25.0) Missing data n=2	14 (23.7) Missing data n=1

Table 1: Randomized patients' characteristics (n=118)

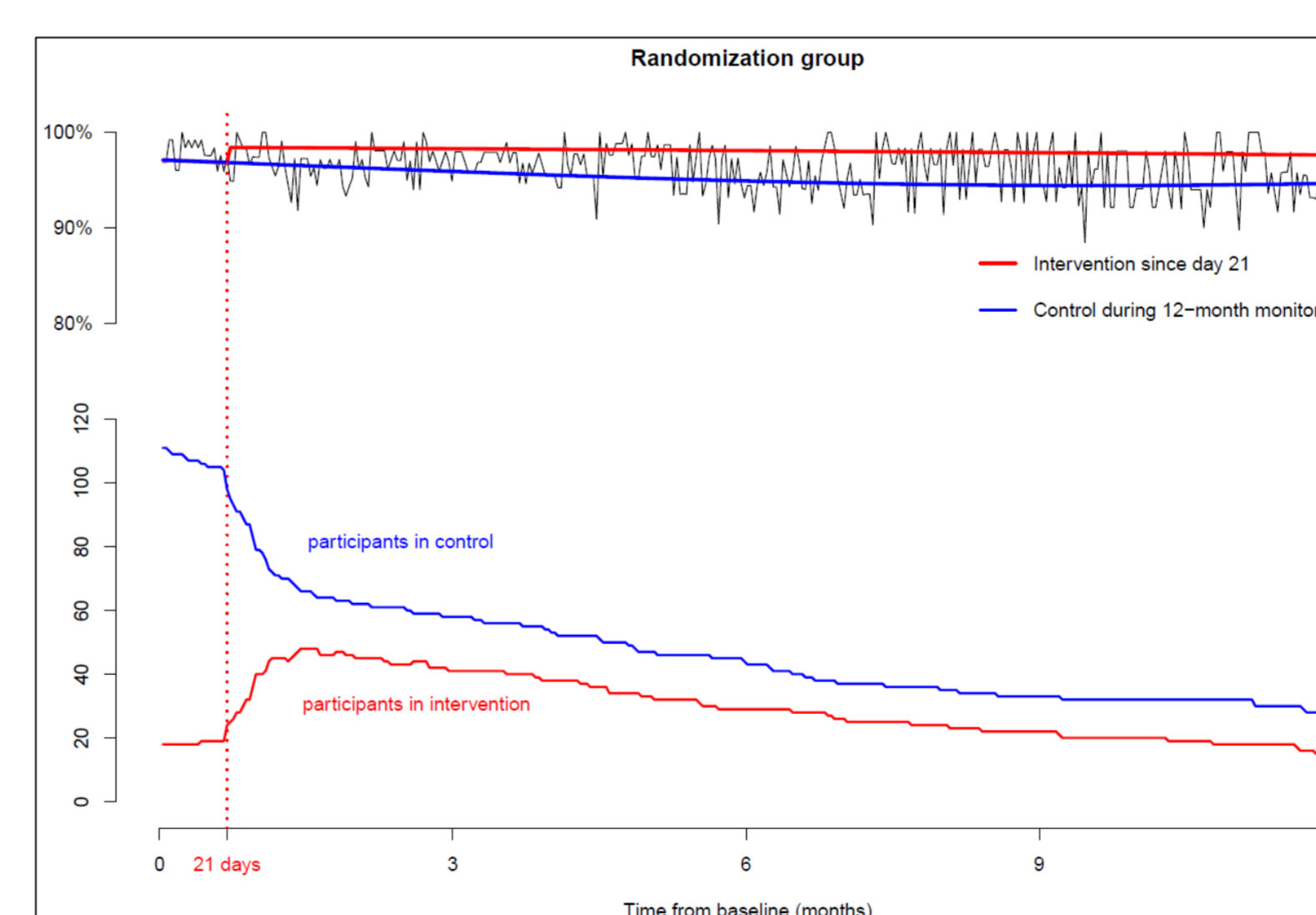


Fig 1: randomization group

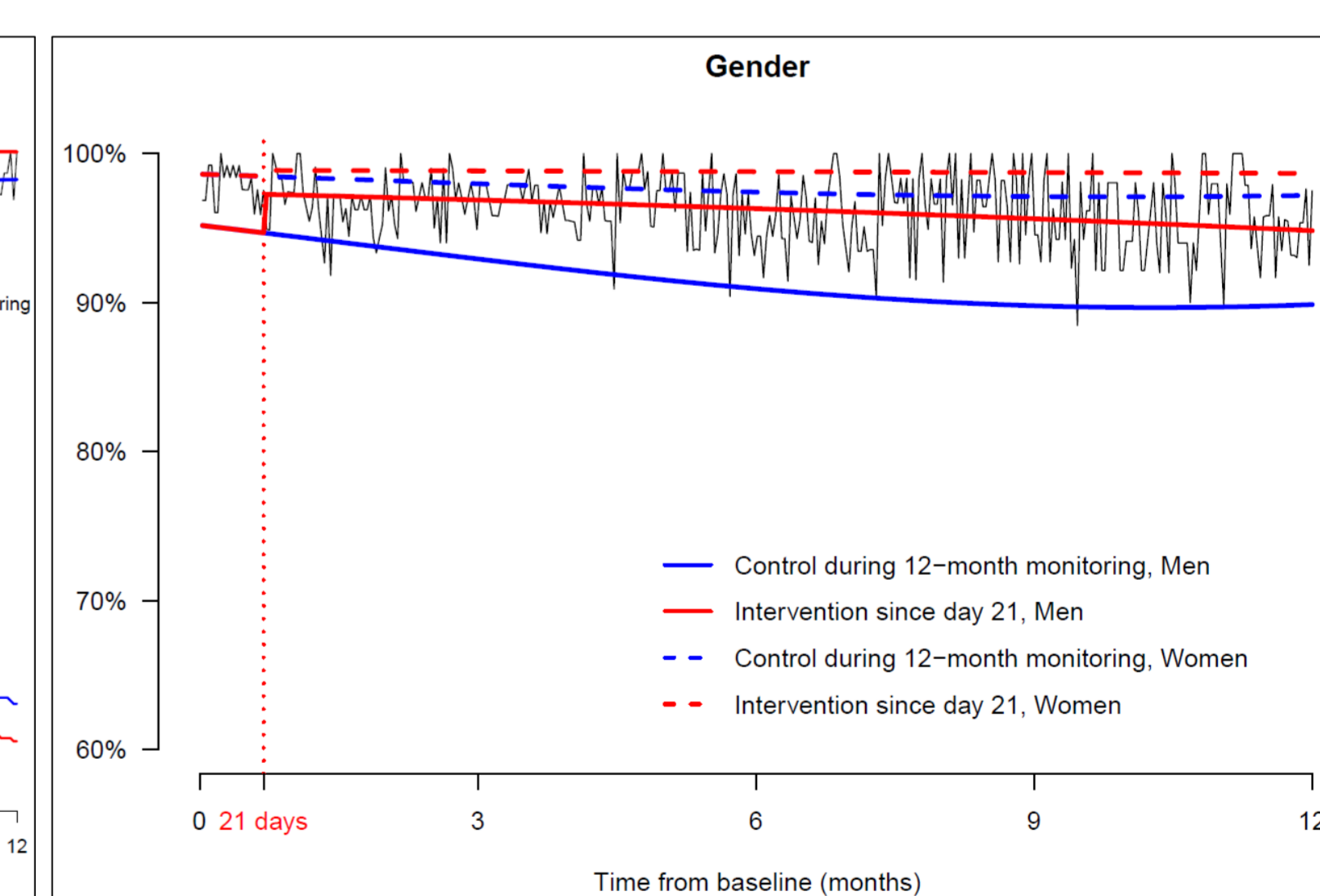


Fig 2: gender

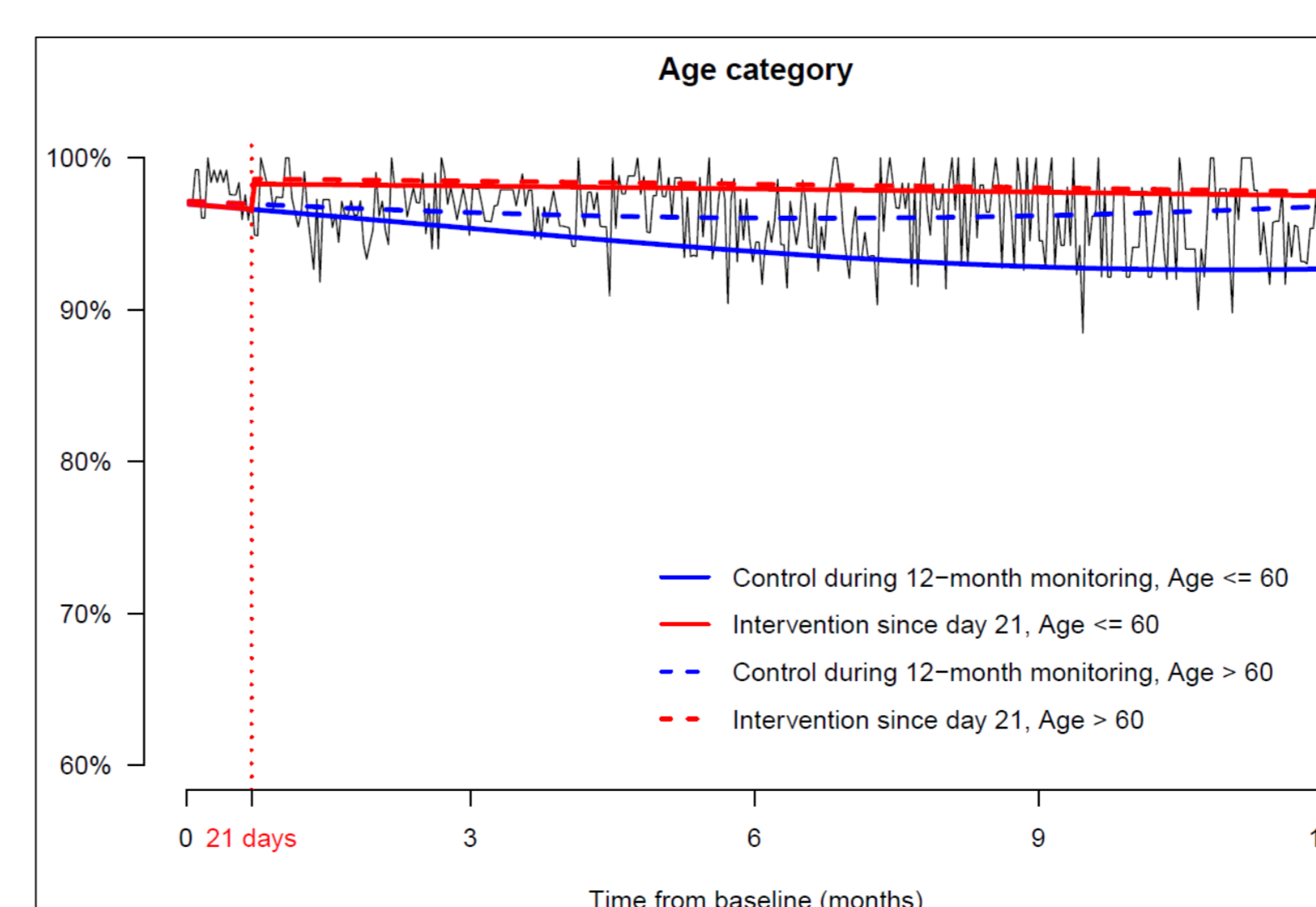


Fig 3: age category

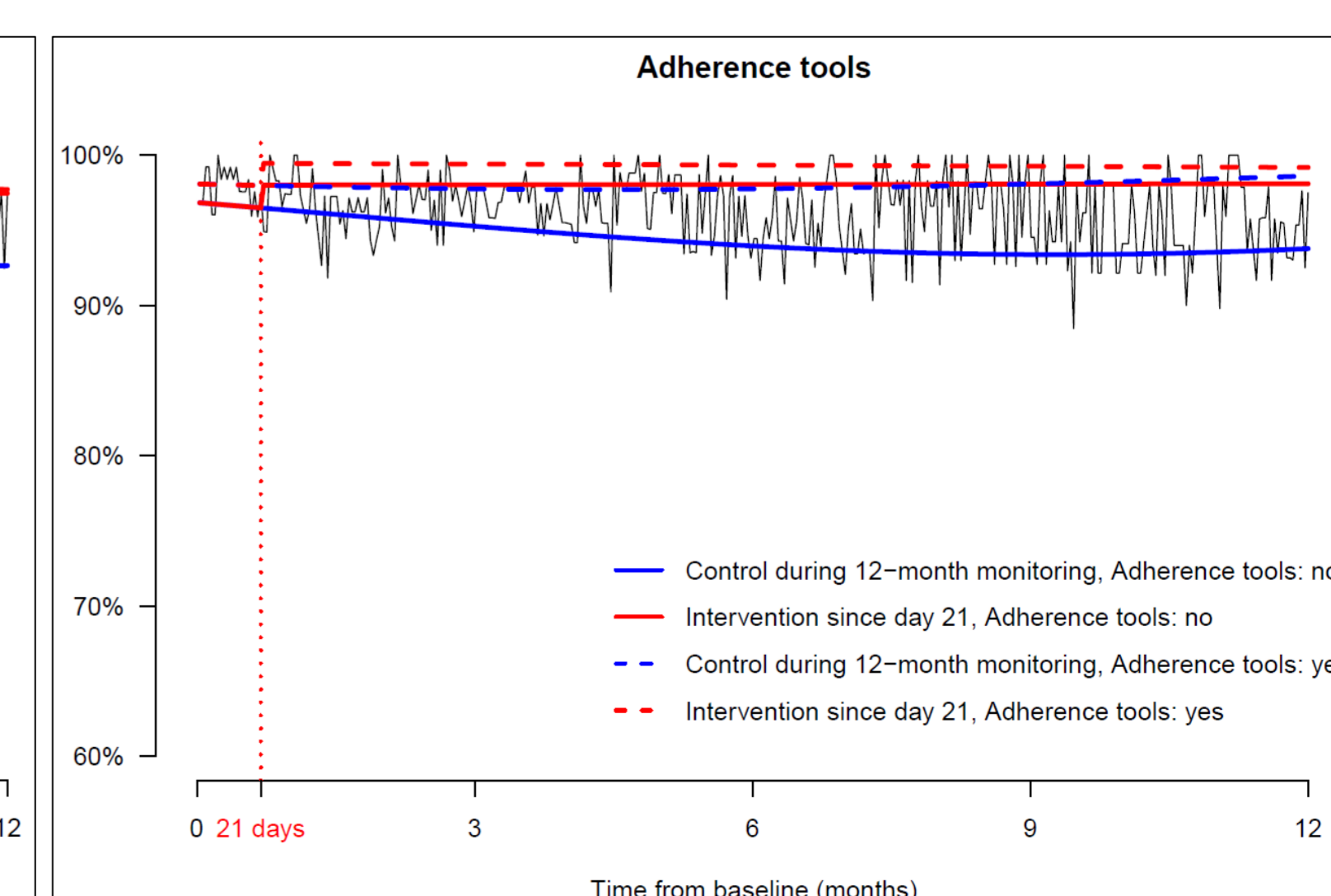


Fig 4: adherence tools use