



THE ECOSYSTEM OF EVIDENCE

Lessons learned in the pandemic era and future challenges

10th International Conference for EBHC Teachers and Developers
10th Conference of the International Society for EBHC
Taormina, 25th - 28th October 2023

#EBHC2023



A learning system using routinely collected cohort data to combine research and care for continuous evaluation of personalized treatment strategies:

The  **Multiscript** Project

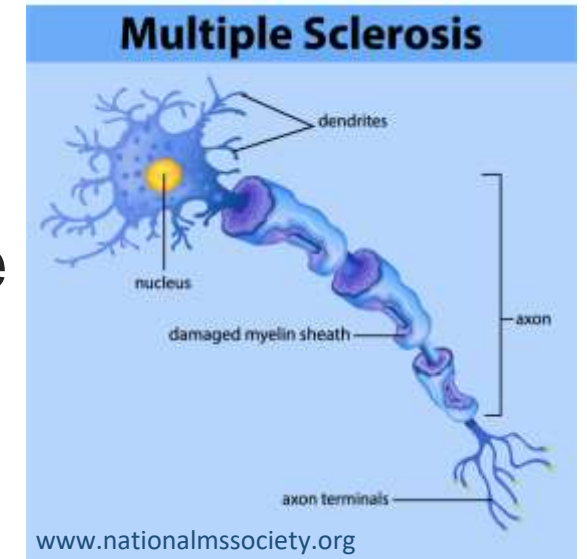
Perrine Jانياud for the

PRAGMATIC
EVIDENCE
LAB

RC2NB

Background

- Substantial clinical heterogeneity
- Disease modifying therapies (DMTs) with diverse benefit-harm profiles
- Lack of universal general guidance on treatment adaptations



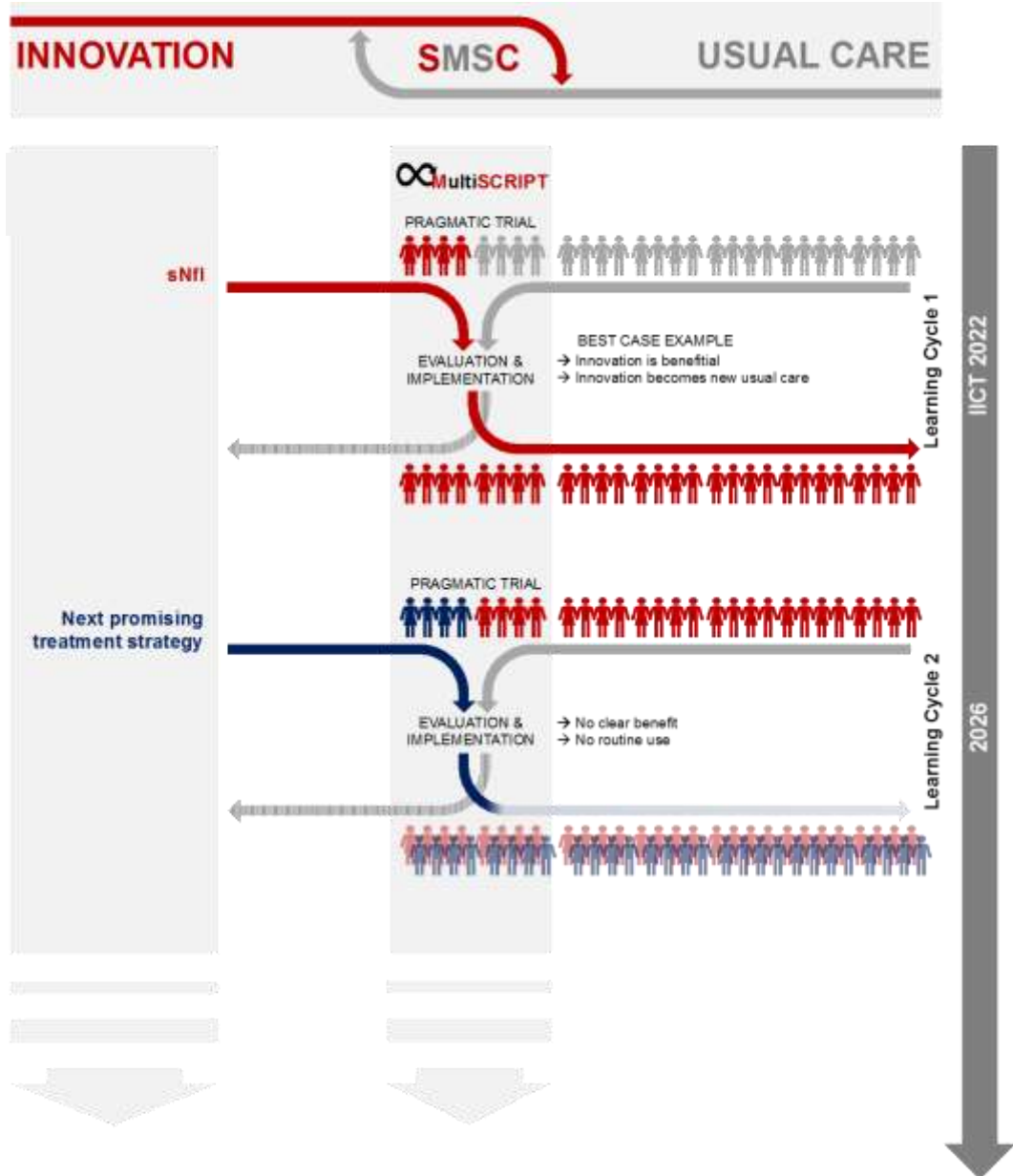
→ *A more personalized approach to MS therapy is urgently needed **to treat patients as little as possible but as much as necessary at the right time***



MultiSCRIPT

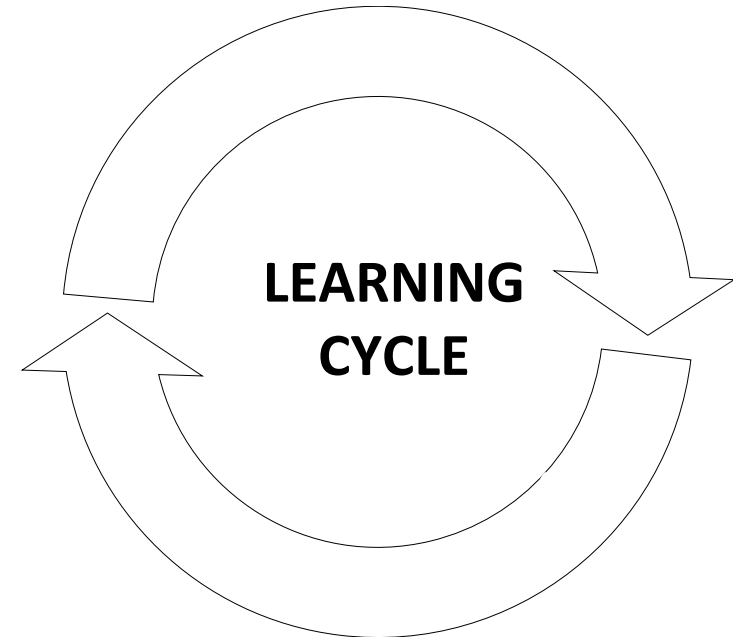
Personalized medicine in Multiple Sclerosis – pragmatic platform trial embedded within the Swiss MS Cohort

Aims



MultiSCRIPT
system

: A learning



Methods

SMSC

Swiss MS Cohort

SMSC Swiss MS Cohort

Dashboard My data Contacts Centers Reports Documents Help

Janiaud Perrine Marine Charlotte

Enrollment Status Ongoing Unlocked

Lock status

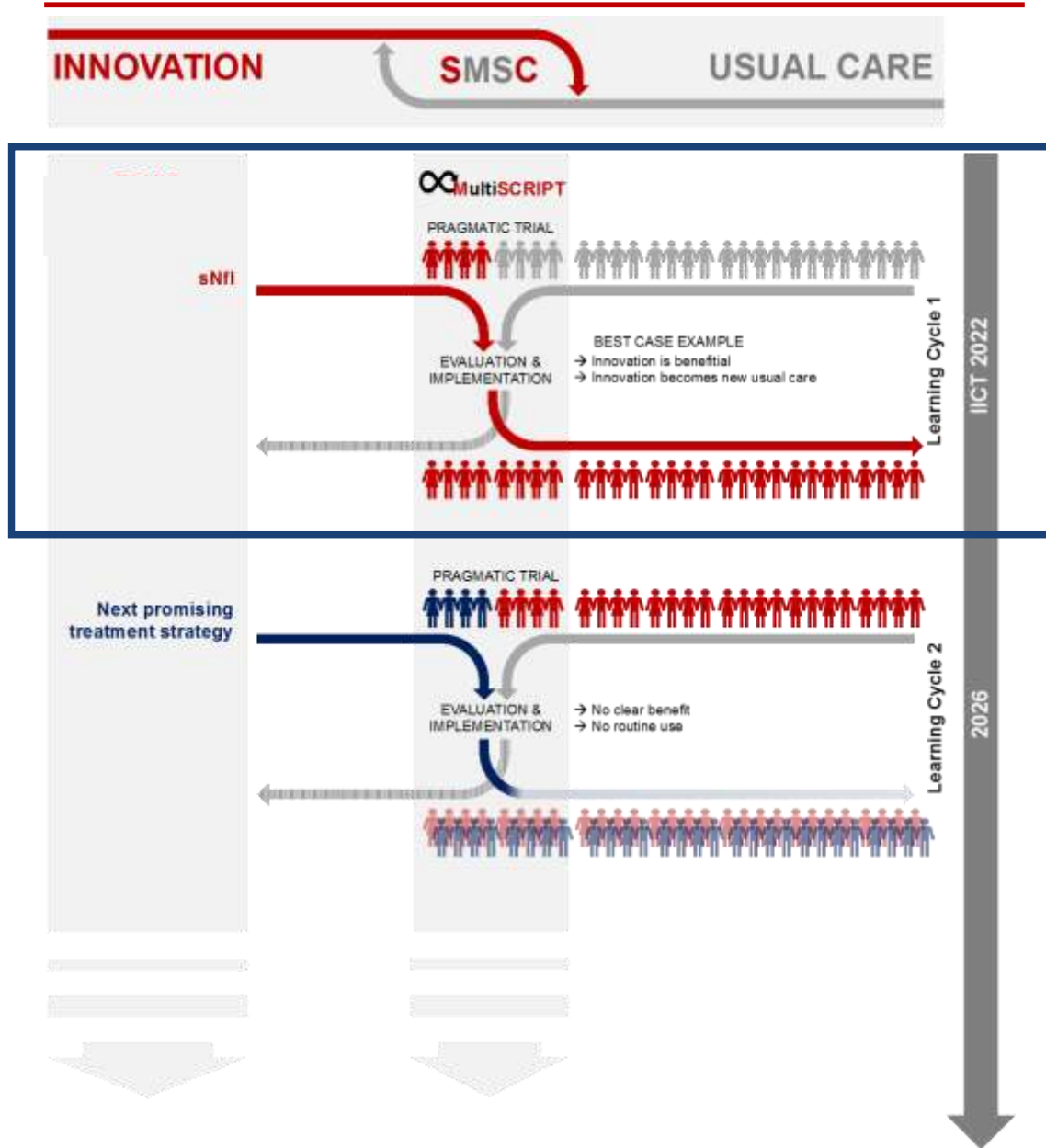
- MS course
- Immunomodulatory MS Treatment
- MRI
- CSF
- Pregnancy
- Relapse
- EDSS scores
 - 1st quartile
 - Median
 - 3rd quartile
- NFL percentile
- NFL z-score
- MRI - Gd+ lesions
- MRI - Num. T2 lesions
- MRI - Vol. T2 lesions [ml]



Key data (as of 8/23):

- 1721 patients
- 13'287 visits (median FU 6.2 years)
- 95% of visits with biosamples
- 725 clinical relapses
- 7275 standardised brain MRI examinations

Methods



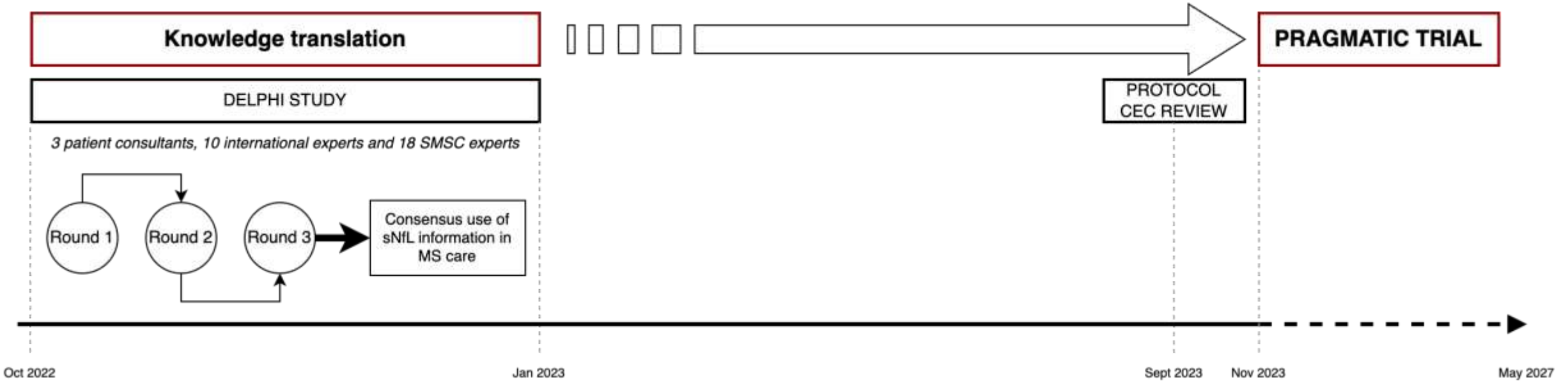
MultiSCRIPT : Cycle 1

Serum neuro-filament light (NfL)
chain

→ Better quality of life?

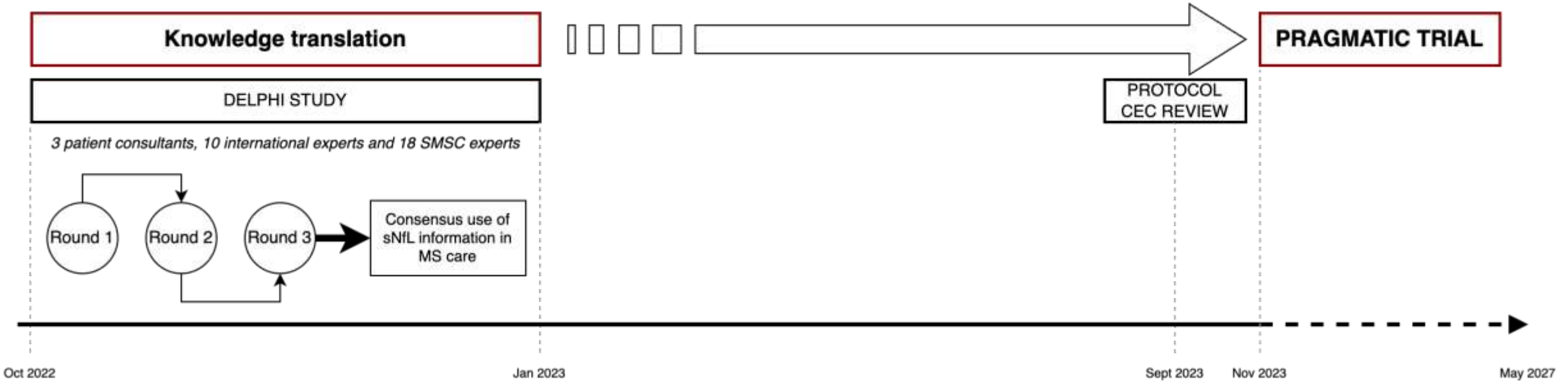
→ Lower risk for evidence of disease
activity?

Results



Status

Limitations



Challenges to consider:

- Routine care vs. usual SMSC care
- Consent / re-consent
- Minimal burden for patients and centers
- Optimization of data infrastructure
 - automatic screening
 - embedded randomization

Conclusion

MultiSCRIPT : Paradigmatic

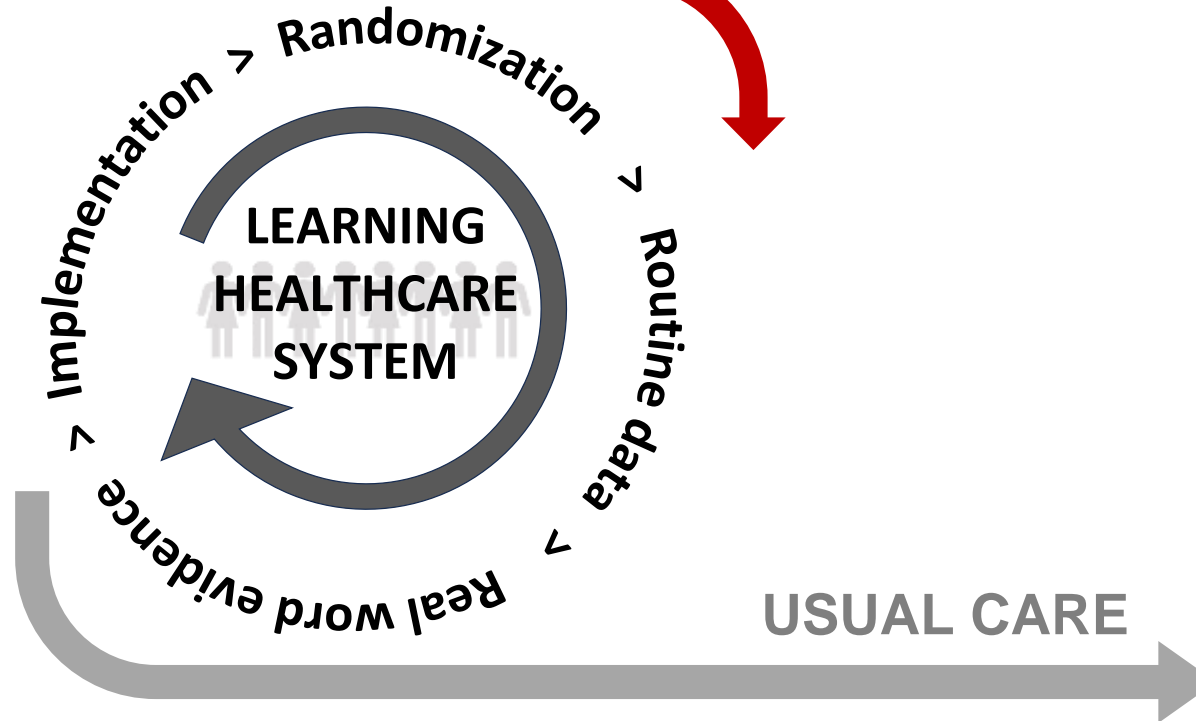
- Pragmatic, patient-centered, and clearly focused on real-world decision making
- Randomized real-world evidence (real world data)
- Direct external control to assess applicability and external validity
- Systematic Patient & Stakeholder Involvement (Delphi)
- Adaptive platform - the beginning of a long-term evolutionary learning system

Conclusion

 **MultiSCRIPT**
system

INNOVATION

: Learning healthcare





MultiSCRIPT

Personalized medicine in Multiple Sclerosis – pragmatic platform trial embedded within the Swiss MS Cohort



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