POSTER P-053

New EUROKIDS Registry for Diagnosis of Paediatric IBD

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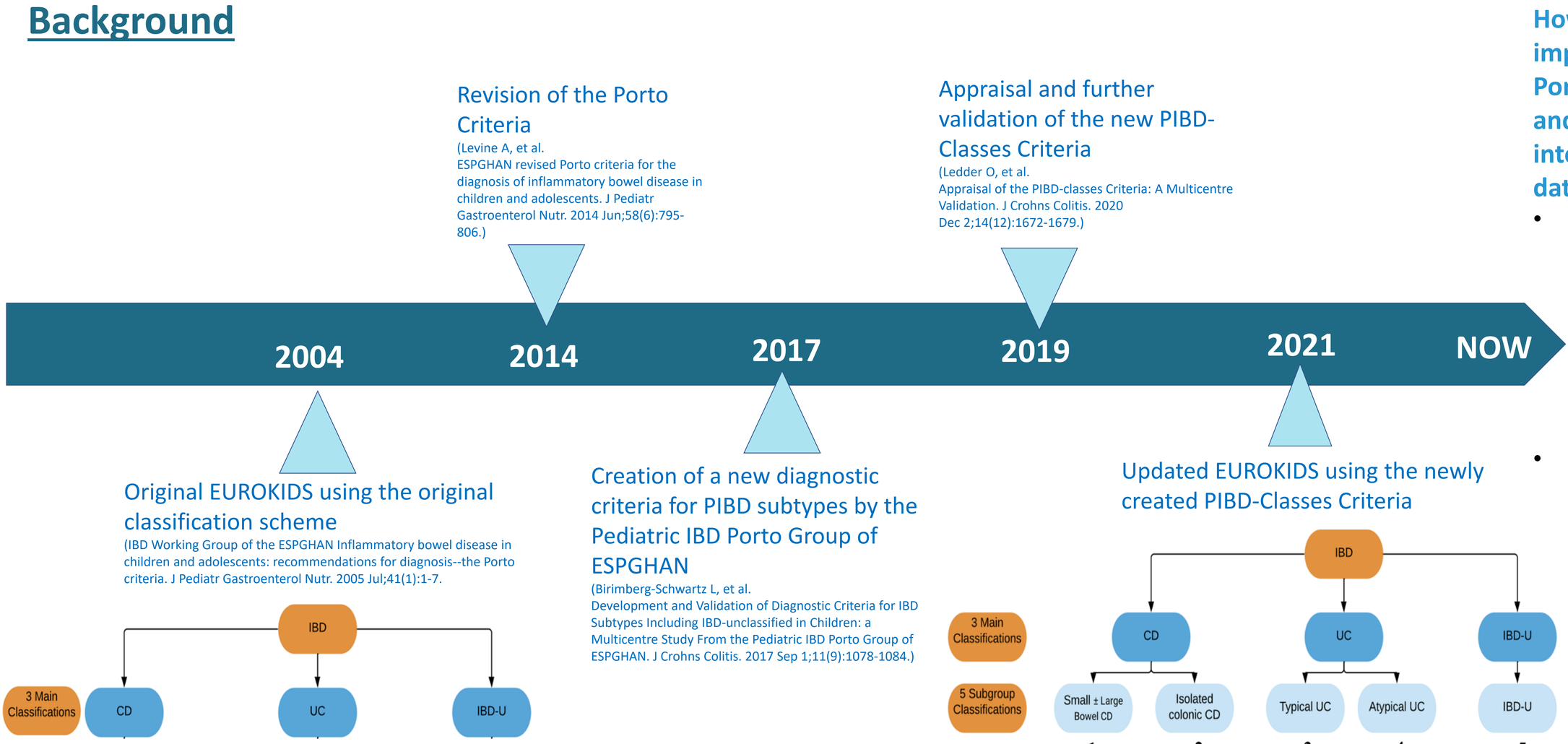
Background



How successful is the implementation of the Porto PIBD-Classes criteria and diagnostic algorithm into the new EUROKIDS database?

- **How?** Accuracy of PIBD-Classes criteria to diagnose PIBD subtypes within EUROKIDS compared to previous validations of the criteria prior to implementation into EUROKIDS
- **Why?** To ensure that EUROKIDS is a useful diagnostic tool that can help to standardise definitions of PIBD across many different countries.

Methods

1. Single timepoint, anonymised data of endoscopy information, histology, radiology, disease behaviour, and Paris Classification was entered into the EUROKIDS database within 3 months of a patient's diagnosis.
2. With this data, the EUROKIDS system automatically assesses the presence/ absence of the PIBD-Classes criteria's 23-features, creating a point total of features present per the three classes of the criteria.
3. The diagnostic algorithm implemented into EUROKIDS translates this point total into a PIBD subtype diagnosis with which the physician can agree/ disagree.
4. Both the presence/ absence of all 23-features and the subsequently related diagnostic algorithm's diagnoses were accessed (April 2022) from the EUROKIDS database as well as the physicians' clinically assigned diagnoses per patient to be compared for concordance, sensitivity, and specificity.
5. Because of a systematic website error, manual corrections were made to the point totals of 12 patients.

Conclusion

- Implementation of the PIBD-Classes criteria and diagnostic algorithm were successful due to their good accuracy in diagnosing the 5 subtypes of PIBD
- After correction of the website-based systematic errors, EUROKIDS can successfully collect and standardise patient data using the latest classification tool of the PIBD-Classes criteria
- This will help in clinical practice to compare across different research centres and will lead to more accurately phenotype cohort of PIBD patients

Disclaimer

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Participating in EUROKIDS

If you would like for your IBD Paediatric patients to contribute to this research, please join the EUROKIDS database by emailing:

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Results

- **96 Children** (4 – 18 years old were included by 11 centers across 8 countries
- Overall concordance between EUROKIDS' algorithm-generated diagnoses and physicians' clinically-generated diagnoses was high **(85%, 82/96)** with 14 disagreements (Figure 1)
- Potential causes for disagreements: framing bias, incomplete diagnostic work-up, or true non-concordance
- Sensitivity and specificity values per phenotype were very high: **97.7% - 100%** and **92.5% - 100%,** respectively.

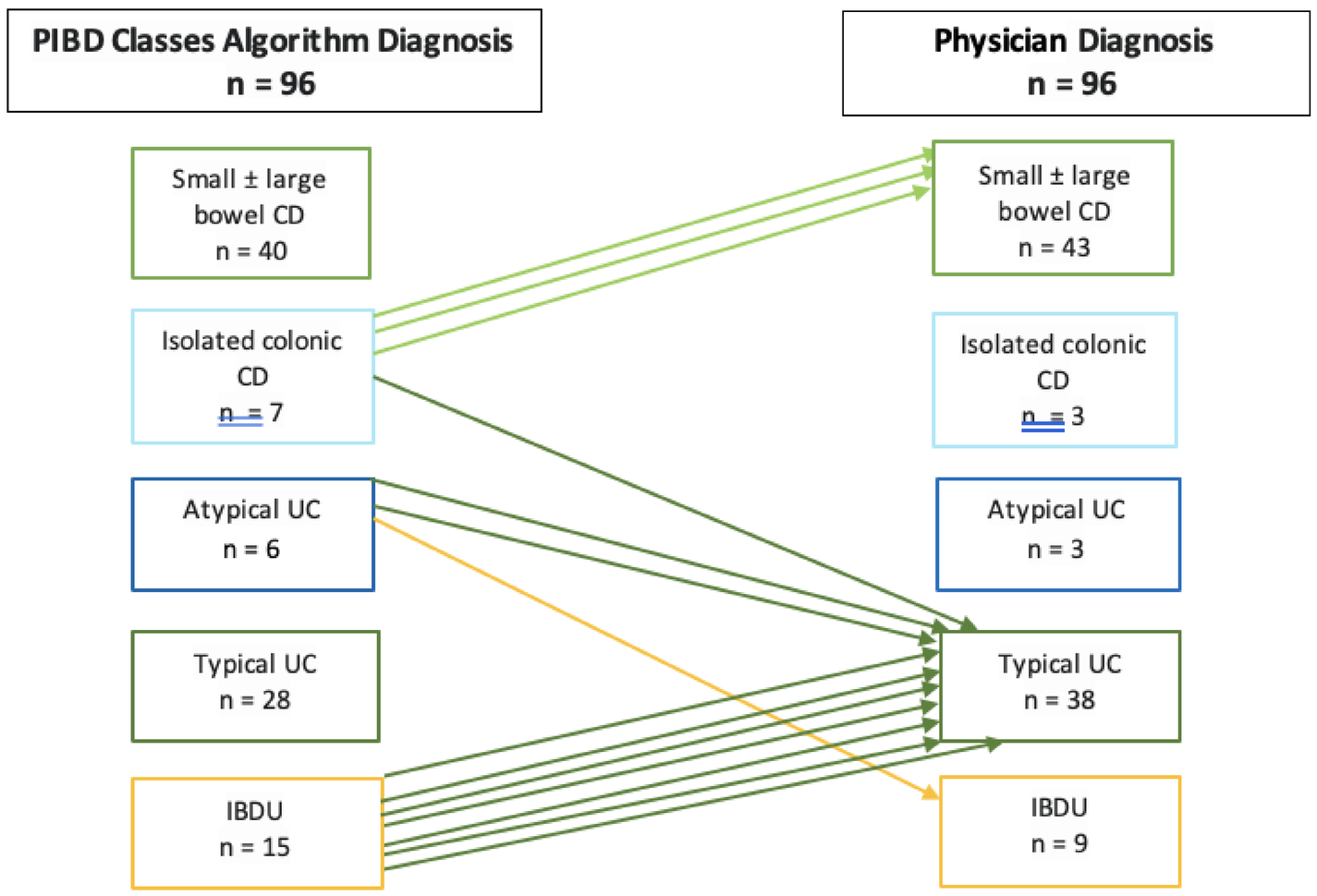

Figure 1 Representation of diagnosis differences between the physicians and the PIBD diagnostic algorithm's phenotype. Each arrow represents the reclassification of one patient from the PIBD proposed phenotype to the physician's final diagnosis.