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## 902.HEALTH SERVICES AND QUALITY IMPROVEMENT - LYMPHOID MALIGNANCIES

### Key Prognostic Factors in Patients with Relapsed/Refractory Follicular Lymphoma: An Evidence Based Systematic Literature and Medical Review

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*Introduction:* A multi-center multi-country retrospective cohort study (FLORA [NCT05338879]), using real-world data (RWD) from electronic medical records (EMRs) and research databases, for patients with relapsed/refractory follicular lymphoma grade 1-3a (r/r FL) treated with standard of care is being conducted to contextualize treatment outcomes in a single-arm trial. A systematic literature review (SLR) was carried out to identify baseline prognostic factors that will be evaluated for imbalances between cohorts in the single-arm trial and RWD study. This SLR was followed by an evidence-based clinical expert review and ranking of prognostic variables in order of importance for the FLORA study as described herein.
*Methods:* The approach and methods of the SLR (International Prospective Register of Systematic Reviews [PROSPERO] CRD42022307561) were informed by guidelines set forth by the Cochrane Handbook for Systematic Reviews of Interventions (Higgins et. al. 2021) and PRISMA (Page et. al. BMJ 2021) and described previously (Hampp et. al. ISPOR 2023). Following the conduct of the SLR, the identified potential prognostic variables were evaluated by the FLORA study team to remove treatment-specific and outcome variables, determine their availability in the single-arm trial and FLORA RWD study, and develop a questionnaire. In the questionnaire, prognostic variables were grouped by type of variable - clinical, laboratory data, or treatment characteristic. Each prognostic variable was reviewed by an international panel consisting of 3 clinical experts in the field of lymphoma who categorized the prognostic impact on treatment response and survival on a 5-point scale ranging from "Very high importance" to "Not important". The clinicians were asked to consider possible correlation among the variables, possible effect modifiers, specific variable definitions (e.g., chemoresistant), and whether there were any other prognostically important variables not captured in the questionnaire. For each variable the clinical experts categorized the availability within routine care on a 3-point scale ranging from "Readily available" to "Limited availability". The results of the 3 expert completed questionnaires were reviewed and the top 10 highest ranking variables were determined by summing the clinicians' categorization of prognostic impact and considering variable availability in the event of a tie. Individual interviews with each clinical expert were held to clarify variables and definitions, discuss discrepant categorization, and rank the prognostic variables from 1-10. Following the 3 interviews, the ranking of each variable was summed across the 3 experts to determine the final ranking.
*Results:* Across the 13 studies included, the SLR identified 28 prognostic factors, including patient demographics and clinical characteristics, disease and treatment characteristics, and laboratory data. Seven clinical outcomes with statistically significant associations were identified (most commonly, overall survival [OS], progression-free survival [PFS], and relapse/progression). No additional prognostic factors were identified by the clinical experts. The final ranked list of the 10 most important prognostic variables in descending order of importance includes: progression of disease within 2 years (POD24), chemoimmunorefractory/chemoresistant, refractory to last line of therapy (LoT), number of prior LoTs, serum lactate dehydrogenase (LDH), Eastern Cooperative Oncology Group (ECOG) performance status, Follicular Lymphoma International Prognostic Index (FLIPI), age at start of LoT, Ann Arbor disease stage, and refractory to rituximab.
*Conclusion:* SLR-based identification of prognostic factors combined with expert clinical review provides an unbiased evaluation and ranking of the level of evidence to assist in selecting prognostic factors to collect for the FLORA real-world cohort study. The appropriate selection of prognostic factors is critical for valid outcome estimation. These factors will be used for

the evaluation of balance with the single-arm trial and for adjustment in a propensity score model. With this approach, the prognostic factors are chosen *a priori* to enable balancing of baseline covariates prior to outcome estimation.

**Disclosures Costa:** *Genmab:* Consultancy, Honoraria; *BMS:* Consultancy, Honoraria; *Astrazeneca:* Consultancy, Honoraria; *Roche:* Consultancy, Honoraria; *Abbvie:* Consultancy, Honoraria; *Janssen:* Consultancy, Honoraria. **Hampp:** *Regeneron:* Current Employment, Current equity holder in publicly-traded company. **Aggarwal:** *Regeneron:* Current Employment, Current equity holder in publicly-traded company. **Shah:** *IQVIA Inc.:* Current Employment; *National Institutes of General Medical Sciences (NIGMS):* Research Funding; *International Society for Pharmacoepidemiology (ISPE):* Research Funding. **Walsh:** *IQVIA Inc.:* Current Employment. **Thorley:** *IQVIA Inc.:* Current Employment. **Ma:** *Regeneron:* Current Employment, Current equity holder in publicly-traded company. **von Tresckow:** *Pentixapharm:* Consultancy; *Noscendo:* Consultancy; *Incyte:* Consultancy, Honoraria; *AbbVie:* Other: Travel Support; *MSD:* Consultancy, Honoraria, Other: Travel Support, Research Funding; *Lilly:* Consultancy, Honoraria, Other: Travel Support; *Roche:* Consultancy, Honoraria, Other: Travel Support; *Cerus:* Consultancy; *AstraZeneca:* Honoraria, Other: Travel Support; *Novartis:* Consultancy, Honoraria, Other: Travel Support, Research Funding; *Takeda:* Consultancy, Honoraria, Other: Travel Support, Research Funding; *Amgen:* Consultancy; *Pfizer:* Consultancy; *Pierre Fabre:* Other: Travel support; *IQVIA:* Consultancy; *Gilead Kite:* Consultancy, Other: Travel Support; *Miltenyi:* Consultancy; *Allogene:* Consultancy; *BMS/Celgene:* Consultancy, Honoraria.

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