

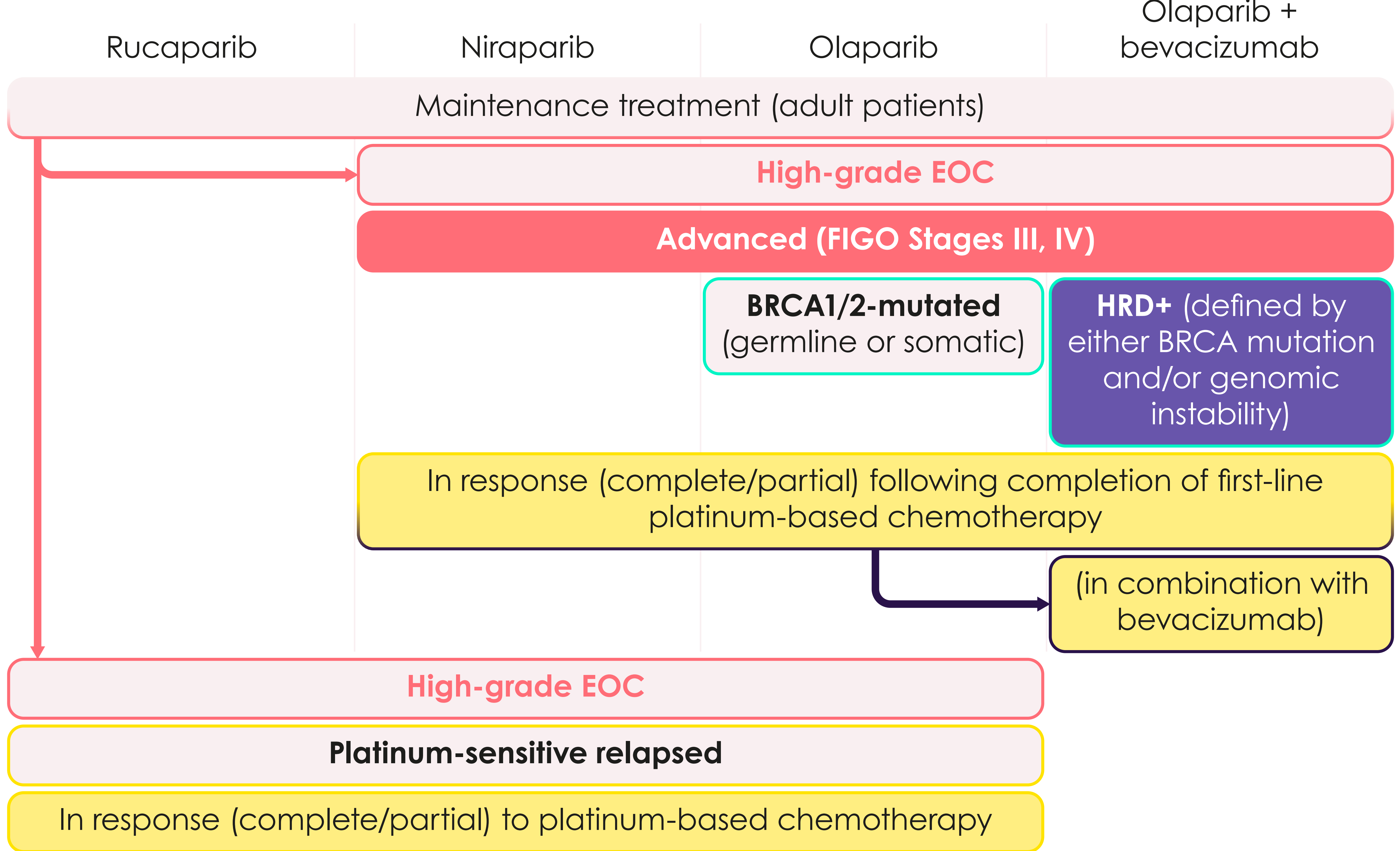
PARP inhibitor selection in ovarian cancer

1 in 2 women  
with advanced ovarian cancer is HRD+<sup>1</sup>

While 15–25% of women  
with ovarian cancer carry a  
BRCA1/2 mutation<sup>1–4</sup>

PARP inhibitors (PARPi) have shown substantial efficacy in BRCA-mutated and HRD+ ovarian cancers, improving progression free survival when used in the maintenance setting<sup>5–7</sup>

EMA indications for PARPi in ovarian cancer<sup>8–10</sup>



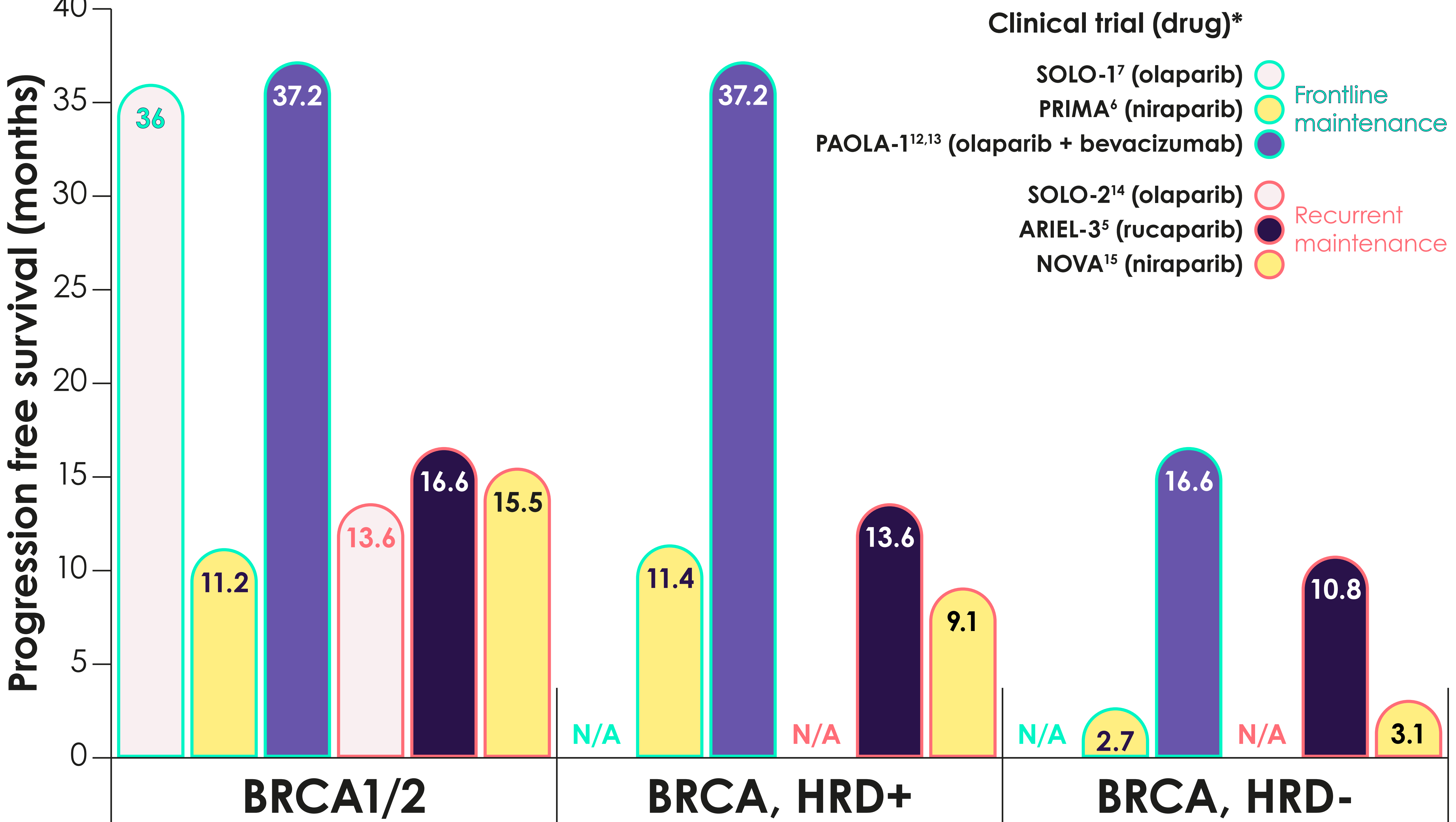
Optimal PARPi selection for frontline maintenance of EOC based on clinical trial evidence<sup>11,12</sup>

BRCA+  
Olaparib  
SOLO-1 trial  
[NCT01844986]

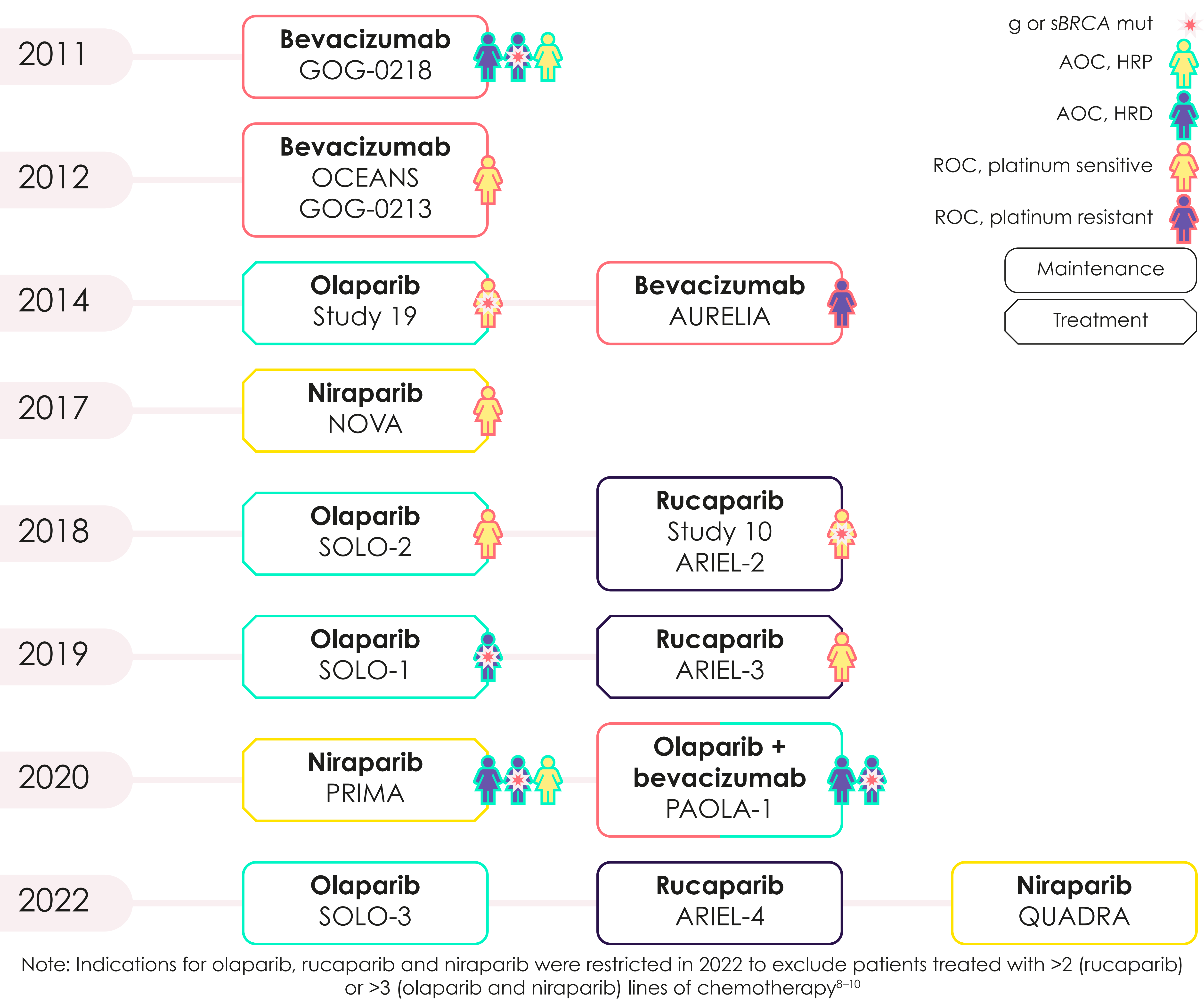
BRCA+/-, HRD+  
Olaparib + bevacizumab  
PAOLA-1 trial  
[NCT02477644]

BRCA-, HRP+  
Niraparib  
PRIMA trial  
[NCT02655016]

Improvement in progression free survival following PARPi use in ovarian cancer

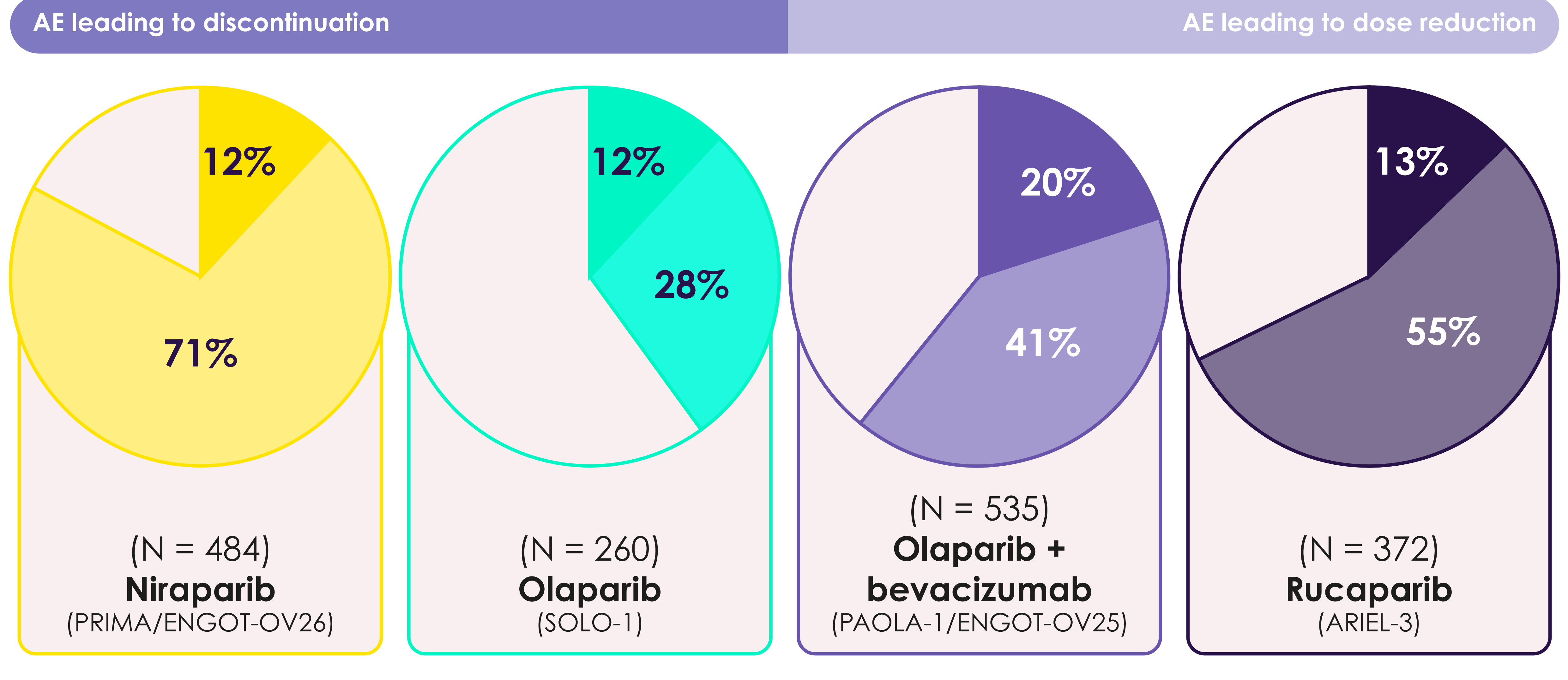


Timeline of EMA approvals for targeted therapies in ovarian cancer (adapted<sup>16</sup>)



PARPi selection should take into consideration both the patient's unique clinical and molecular features, as well as tolerability and toxicity<sup>17</sup>

Safety and toxicity of PARPi for the treatment of ovarian cancer



A network meta-analysis of adverse events related to PARPi based on clinical trial data suggested:

The most common adverse events reported were haematological toxicities, including anaemia

Niraparib was associated with a higher risk of thrombocytopenia and neutropenia, compared to other PARPi (based on indirect comparisons)<sup>18</sup>

\*all trial data in this table is versus placebo (except for PAOLA-1 in which the comparator was placebo + bevacizumab)

Abbreviations: AE, adverse event; AOC, advanced ovarian cancer; BRCA1/2+/-, breast cancer gene (+/- refers to BRCA1/2 mutated/non-mutated); EOC, epithelial ovarian cancer; FIGO, Federation Internationale de Gynecologie et d'Obstetrique; HRD+/-, homologous recombination deficient; HRP+, homologous recombination proficiency; PARP, Poly (ADP-ribose) polymerase; ROC, recurrent ovarian cancer

References. 1. Ledermann et al. Eur J Cancer. 2016;60:49-58. 2. Manchana et al. Gynecol Oncol Rep. 2019;29:102-105. 3. Pal et al. Cancer. 2005;104(12):2807-2816. 4. Pennington et al. Clin Cancer Res. 2014;20(3):764-775. 5. Coleman et al. Lancet. 2017;390(10106):1949-1961. 6. González-Martín et al. N Engl J Med. 2019;381(25):2391-2402. 7. Moore et al. NEJM. 2018;379(26):2495-2505. 8. Zejula SmPC. 2023. ema.europa.eu. 9. Lynparza SmPC. 2023. ema.europa.eu. 10. Rubraca SmPC. 2023. ema.europa.eu. 11. Tew et al. J Clin Oncol. 2020;38(30):3468-3493. 12. Mirza et al. Annals of Oncology. 2020;31:1148-1159. 13. Ray-Coquard et al. N Engl J Med. 2019;381(25):2416-2428. 14. Poveda et al. Journal of Clinical Oncology. 2020;38(15\_suppl):6002-6002. 15. Mirza et al. N Engl J Med. 2016;375(22):2154-2164. 16. Nero et al. Cancers. 2021;13(6):1298. 17. Franzese et al. Cancer Treat Rev. 2019;73:1-9. 18. Luo et al. Front Oncol. 2022;12:815265.

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