# Supplementary appendix – Figures

**Figure A: PRISMA flow diagram**

Diagram

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**Key**: PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

**Figure B: Subgroup analyses for pooled EXPLORER and PATHFINDER – overall survival in the RAC-RE population**

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**Key:** AdvSM, advanced systemic mastocytosis; ASM, aggressive systemic mastocytosis; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HR, hazard ratio; MCL, mast cell leukemia; NA, not applicable; RAC-RE, response assessment committee response-evaluable; SM-AHN, systemic mastocytosis with associated hematological neoplasm.

**Figure C: Subgroup analyses for pooled EXPLORER and PATHFINDER – overall response rate in the RAC-RE population**

Table

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**Key:** AdvSM, advanced systemic mastocytosis; ASM, aggressive systemic mastocytosis; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HR, hazard ratio; MCL, mast cell leukemia; NA, not applicable; OR, odds ratio; RAC-RE, response assessment committee response-evaluable; SM-AHN, systemic mastocytosis with associated hematological neoplasm.

**Figure D: Subgroup analyses for pooled EXPLORER and PATHFINDER – complete remission rate in the RAC-RE population**

Table

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**Key:** AdvSM, advanced systemic mastocytosis; ASM, aggressive systemic mastocytosis; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; HR, hazard ratio; MCL, mast cell leukemia; NA, not applicable; OR, odds ratio; RAC-RE, response assessment committee response-evaluable; SM-AHN, systemic mastocytosis with associated hematological neoplasm.

**Figure E: Kaplan–Meier of pooled avapritinib (safety) versus pooled midostaurin (FAS)**

**Chart

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**Key:** FAS, full analysis set.

**Figure F: Kaplan–Meier of PATHFINDER avapritinib (RAC-RE) versus pooled midostaurin (PEP)**

Chart

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**Key:** PEP, primary efficacy population; RAC-RE, response assessment committee response-evaluable.

**Figure G: Kaplan–Meier of pooled avapritinib (RAC-RE, midostaurin-naïve) versus pooled midostaurin (PEP)**

**Chart

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**Key:** PEP, primary efficacy population; RAC-RE, response assessment committee response-evaluable.

**Figure H: Kaplan–Meier of pooled avapritinib (RAC-RE, 200 mg) versus pooled midostaurin (PEP)**

**Chart

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**Key:** PEP, primary efficacy population; RAC-RE, response assessment committee response-evaluable.

**Figure I: Overall survival results when number of C-findings is included as a matching variable**

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Description automatically generated**Key:** CI, confidence interval; HR, hazard ratio; ITC, indirect treatment comparison; MAIC, matching-adjusted indirect comparison; PEP, primary efficacy population; RAC-RE, response assessment committee response-evaluable.

**Note:** \*, pooled EXPLORER and PATHFINDER population, \*\*, pooled D2201 and A2213 population.

**Figure J: Overall response rate and complete remission results when number of C-findings is included as a matching variable**

Table

Description automatically generated**Key:** CI, confidence interval; CR, complete remission; ITC, indirect treatment comparison; MAIC, matching-adjusted indirect comparison; OR, odds ratio; ORR, overall response rate; PEP, primary efficacy population; RAC-RE, response assessment committee response-evaluable.

**Note:** \*, pooled EXPLORER and PATHFINDER population.