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### Preliminary Data Report on a Phase 1/2A First in Human Study of the Menin-KMT2A (MLL) inhibitor KO-539 in patients with relapsed or refractory acute myeloid leukemia

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# KO-539 is a Potent and Selective Oral Inhibitor of the Menin-KMT2A (MLL) Complex





# Key KO-539 Preclinical Toxicology and Pharmacokinetics Findings

- Toxicology/Safety Pharmacology
  - No evidence of QTc prolongation in dogs
  - Low torsadogenic risk based on key cardiac ion channels interactions
- Pharmacokinetics
  - Primarily metabolized by CYP3A4 generating biologically two active metabolites
  - KO-539 and metabolite(s) possess CYP3A4 inhibitory properties
  - High protein binding (>99%)



# KOMET-001 is a Phase 1/2A First-in-Human Study of KO-539 in Patients with Relapsed/Refractory AML



NCT04067336

### Patient Demographics and Baseline Characteristics

| KOMET-001 Patients                                 | N=12        |
|--|-------------|
| Median Age, y (min, max)                           | 67 (33, 80) |
| Gender, n (%)                                      |             |
| Male   | 8 (66.7%)   |
| Female   | 4 (33.3%)   |
| Race, n (%)  |             |
| White  | 8 (66.7%)   |
| Number of prior lines of therapies, median (range) | 3 (2-7)     |
| Number of patients with prior transplant           | 1           |

Data as of 02 November 2020



### **Patient Status Summary**

#### **Disposition & Discontinuation**

| KOMET-001 Patients    | N=12 |
|-----------------------|------|
| Patients in Treatment | 6    |
| Patients in Follow-Up | 1    |
| Patients off Study    | 5    |

| Reason for Study Treatment<br>Discontinuation      | N=6 |  |
|--|-----|--|
| Symptomatic Deterioration                          | 1   |  |
| Disease Progression as<br>assessed by Investigator | 4   |  |
| Withdrawal of Consent                              | 1   |  |

| Reason for Study<br>Discontinuation | N=5 |  |
|-------------------------------------|-----|--|
| Death                               | 2   |  |
| Physician Decision                  | 2*  |  |
| Other                               | 1   |  |

Data as of 02 November 2020

\*both patients expired soon after physician decision to discontinue study participation



### KO-539 Demonstrates Encouraging Early Clinical Activity



\*Expanded to characterize PK



Data as of 02 November 2020

# Continuous Daily Dosing of KO-539 Has Been Well-Tolerated with a Manageable Safety Profile

- No dose discontinuations due to treatment-related AEs
- No evidence of QT prolongation or other clinically significant ECG changes

| Treatment-related AEs (N=12) | Grade ≥ 3<br>(all) | Grade 1,2<br>(≥ 10%) |
|------------------------------|--------------------|----------------------|
| Pancreatitis                 | 1 (8.3%)           | 0%                   |
| Lipase increased             | 1 (8.3%)           | 0%                   |
| Neutrophil count decreased   | 1 (8.3%)           | 0%                   |
| Tumor lysis syndrome         | 1 (8.3%)           | 0%                   |
| Deep vein thrombosis         | 1 (8.3%)           | 0%                   |
| Nausea                       | 0%                 | 3 (25%)              |
| Rash                         | 0%                 | 2 (16.7%)            |
| Diarrhea                     | 0%                 | 2 (16.7%)            |

Data as of 02 November 2020



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# Dose-related Increase in Exposure and Wide Inter-Patient Variability in Patients



n=11; exposure (i.e.,  $AUC_{0-24 hr}$ ) not evaluable in one patient



# KO-539 Pharmacokinetics in Patients Do Not Appear to be Affected by Co-administration of an CYP3A4 Inhibitor



Moderate CYP3A4 inhibitor: Fluconazole, Isavuconazole Strong CYP3A4 inhibitor: Itraconazole, Posaconazole, Voriconazole, Ketoconazole

### Conclusions

- KO-539 is a potent and selective inhibitor of the Menin-KMT2A (MLL) complex
- KO-539 demonstrates early encouraging clinical activity in different genomic subgroups
- KO-539 has been well tolerated and with a manageable safety profile to date
- Plasma KO-539 exposure increases with dose
- KO-539 pharmacokinetics and clinical activity do not appear to be affected by co-administration of an CYP3A4 inhibitor
- KOMET-001 is continuing to enroll patients for phase 1 dose escalation, with plans to expand to phase 2 once recommended phase 2 dose is determined



### Acknowledgements

- The patients, their families and caregivers
- The study investigators and their study teams
- The study is sponsored by Kura Oncology, Inc.

