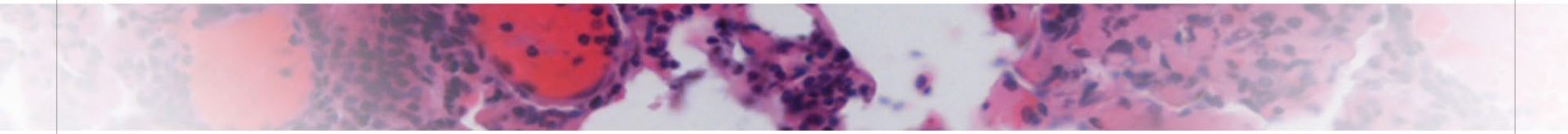
American Society *of* Hematology

Helping hematologists conquer blood diseases worldwide



Analysis of Practice Patterns Among Experts and Community Healthcare Providers for the Treatment of Acute Myeloid Leukemia

Terrence F. Fagan[1]; Farhad Ravandi, MD[2]; B. Douglas Smith, MD[3]; Roland P. Walter, MD, PhD[4]; Eunice S. Wang, MD[5]; Timothy A. Quill, PhD[1]; Kevin L. Obholz, PhD[1]; Jeffrey E. Lancet, MD[6]

[1]Clinical Care Options, LLC, Reston, VA, USA; [2]The University of Texas MD Anderson Cancer Center, Houston, TX; [3]Johns Hopkins Medical Institutes, Baltimore, MD; [4]University of Washington, Seattle, Washington; [5]Roswell Park Comprehensive Cancer Center, Buffalo, NY; [6]H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL.

Disclosures

Ravandi: MacroGenics: Research Funding; AbbVie: Consultancy, Honoraria, Research Funding; Jazz Pharmaceuticals: Consultancy, Honoraria, Research Funding; Xencor: Consultancy, Honoraria, Research Funding; Orsenix: Consultancy, Honoraria, Research Funding; Astellas: Consultancy, Honoraria, Research Funding; Amgen: Consultancy, Honoraria, Research Funding; Celgene: Consultancy, Honoraria; BMS: Consultancy, Honoraria, Research Funding; AstraZeneca: Consultancy, Honoraria. **Smith**: Agios: Consultancy, Membership on an entity's Board of Directors or advisory committees; Celgene: Consultancy, Membership on an entity's Board of Directors or advisory committees; Pfizer: Consultancy, Membership on an entity's Board of Directors or advisory committees; Novartis: Consultancy, Membership on an entity's Board of Directors or advisory committees; Jazz: Consultancy, Membership on an entity's Board of Directors or advisory committees. **Walter**: Selvita: Research Funding; Race Oncology: Consultancy; Seattle Genetics: Research Funding; Pfizer: Consultancy, Research Funding; New Link Genetics: Consultancy; MacroGenics: Research Funding; Agios: Consultancy, Research Funding; Amgen: Consultancy, Research Funding; Amphivena: Current equity holder in publicly-traded company; Aptevo: Consultancy, Research Funding; Argenx: Consultancy; Arog: Research Funding; Astellas: Consultancy; BioLineRx: Consultancy, Research Funding; BiVictriX: Consultancy; Boston Biomedical: Consultancy; Celgene: Consultancy, Research Funding; Daiichi: Consultancy; Genentech: Consultancy; ImmunoGen: Research Funding; Jazz: Consultancy, Research Funding; Kite: Consultancy; Stemline: Research Funding. **Wang**: Bristol Meyers Squibb (Celgene): Consultancy; Jazz Pharmaceuticals: Consultancy; AbbVie: Consultancy; Pfizer: Speakers Bureau; Genentech: Consultancy; Stemline: Speakers Bureau; PTC Therapeutics: Consultancy; MacroGenics: Consultancy; Astellas: Consultancy. **Lancet**: AbbVie: Consultancy; Agios Pharmaceuticals: Consultancy, Honoraria; Astellas Pharma: Consultancy; Celgene: Consultancy, Research Funding; Daiichi Sankyo: Consultancy; ElevateBio Management: Consultancy; Jazz Pharmaceuticals: Consultancy; Pfizer: Consultancy. **Fagan, Obholz, Quill**: no relevant financial conflicts to disclose.

Off Label Disclosure: In this report of results from a treatment decision support tool for AML, some of the drugs selected by the experts are recommended in off-label applications (eg, IDH2 inhibitor enasidenib in frontline AML therapy).

Background

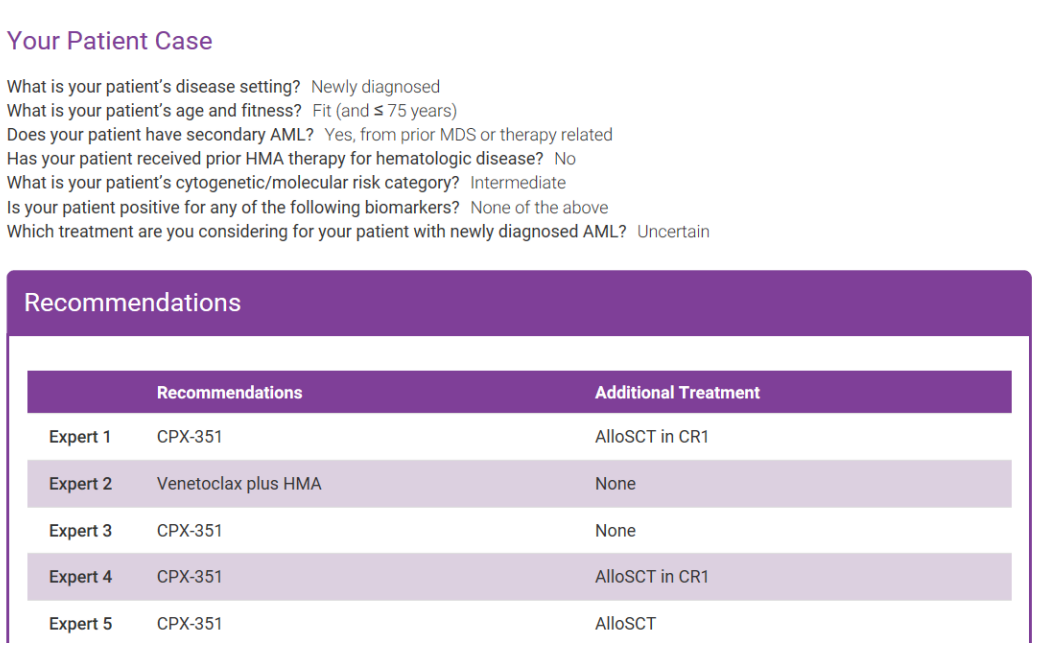
- Acute myeloid leukemia (AML) treatment options have expanded rapidly, with 9 new agents FDA approved since 2017
- This has provided many new strategies for both patients and healthcare providers (HCPs), but it has also introduced new challenges in treatment selection
- To address this, CCO developed an online AML decision support tool designed to provide HCPs with expert guidance for optimal individualized patient treatment selection

AML Tool Development

- 5 experts identified a simplified set of key patient/disease characteristics on which they based treatment recommendations for patients with AML
  - **Experts**: Jeffrey E. Lancet, MD; Farhad Ravandi, MD; B. Douglas Smith, MD; Roland P. Walter, MD, PhD; Eunice S. Wang, MD
  - **Patient/disease characteristics**: disease setting, age and fitness, secondary AML, previous HMAs, cytogenetic/ molecular risk factors, biomarkers, others
- The expert panel provided treatment recommendations in February 2019 for 330 distinct case scenarios in ND (n = 150) and R/R (n = 180) AML

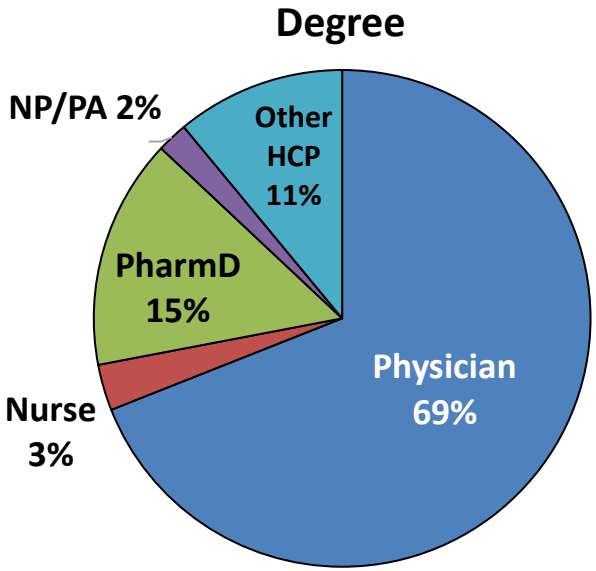
Using the AML Tool

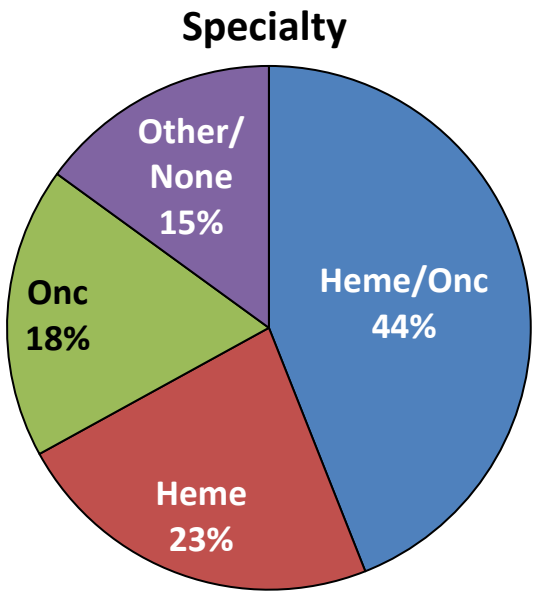
- HCPs are prompted to select defined patient/ disease characteristics from drop-down menus and then are asked to provide their Tx choice
- They then receive expert recommendations for that case scenario

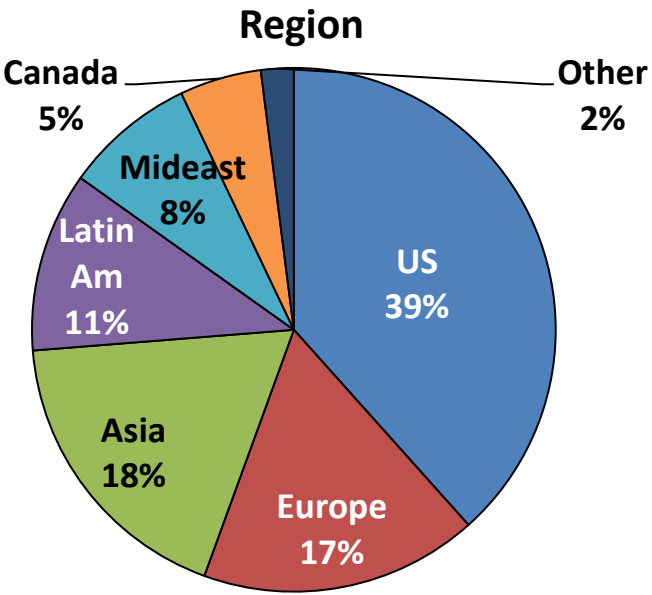


Demographics of AML Tool Participants

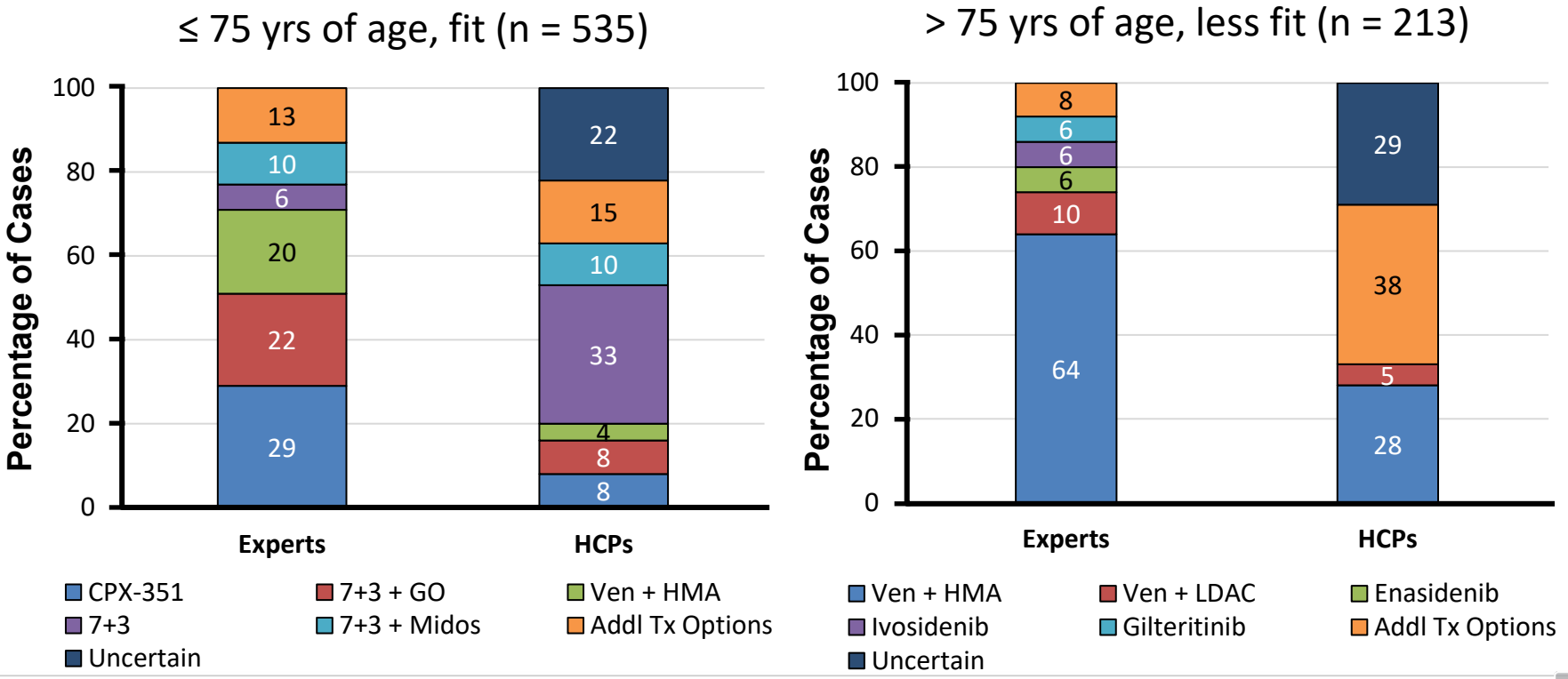
- A total of 417 HCPs entered 934 patient scenarios from June 2019 - July 2020



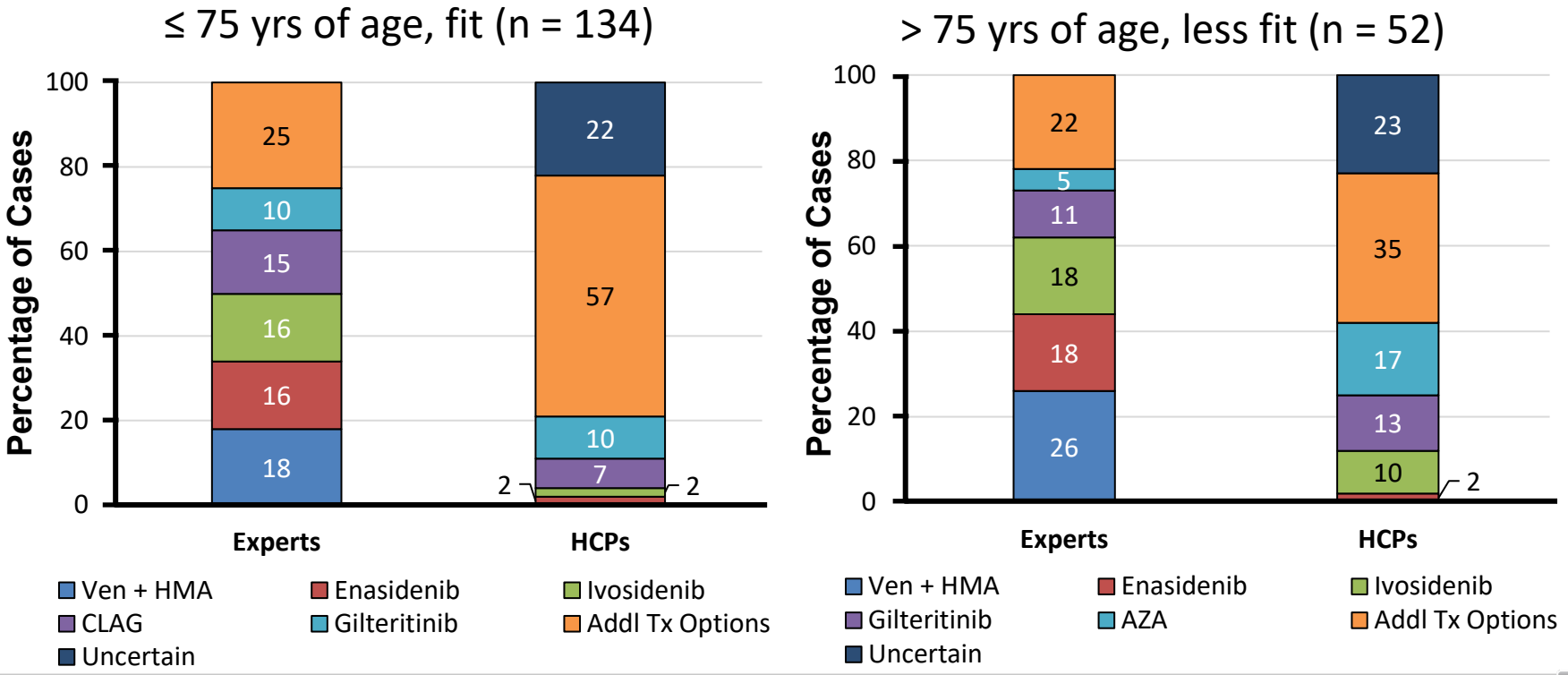




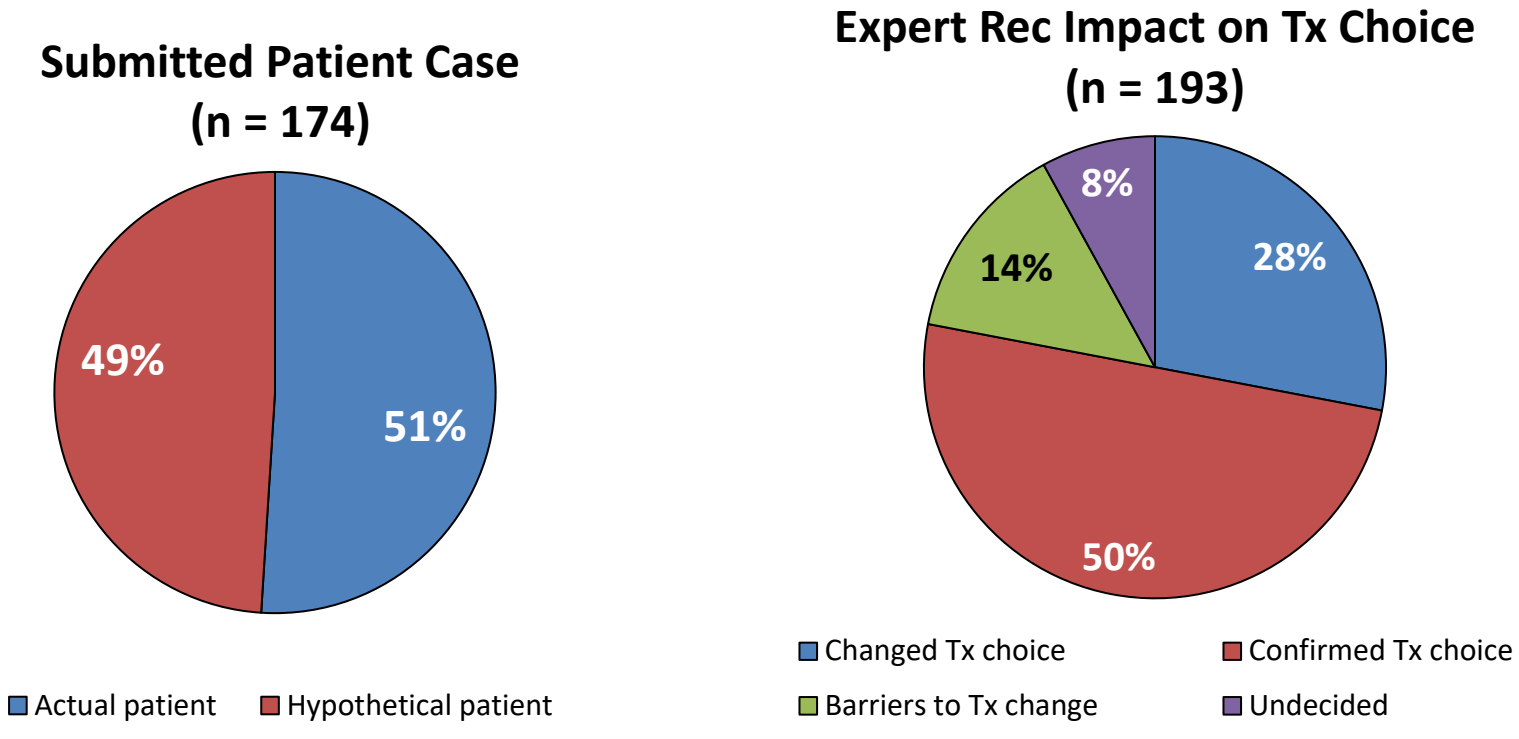
Treatment Recommendations for Cases of ND AML



Treatment Recommendations for Cases of First Relapse AML



Case Disposition and Recommendation Impact



Conclusions

- Data analysis showed expert consensus regarding Tx strategies for AML, including:
  - Venetoclax plus HMAs for older, less fit patients with ND AML
  - Targeted therapies for patients with AML and *FLT3* or *IDH1/2* mutations
- HCP practice patterns differed considerably from the experts for most cases
  - Fit, younger ND AML: CPX-351, 7+3 plus gemtuzumab ozogamicin, or venetoclax + HMA selected by experts in 71% of cases vs 20% for HCPs
  - Older, less fit ND AML: venetoclax plus HMA or LDAC selected by experts in 74% of cases vs 33% for HCPs
  - In first relapse AML cases with FLT3 or IDH1/2 mutations, experts chose targeted therapies in 87% of cases vs 41% for HCPs
- Differences between HCPs and experts suggest continued educational need to increase HCP awareness of best practices in AML