# 19th Annual INDY HEMATOLOGY REVIEW® State of the Art 2022: Emerging Therapies in Hematologic Malignancies and Disorders

### RUEMU E. BIRHIRAY, MD

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PARTNER, HEMATOLOGY ONCOLOGY OF INDIANA, AMERICAN ONCOLOGY NETWORK, PA, INDIANAPOLIS, IN

CLINICAL PROFESSOR OF MEDICINE,

MARIAN UNIVERSITY COLLEGE OF MEDICINE, INDIANAPOLIS, IN







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Making Cancer History

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#### **ACHIEVING TOMMORROW'S OUTCOMES TODAY THROUGH EDUCATION™**

### **ACUTE MYELOGENOUS LEUKEMIA**



ACEWING: Phase III, Gilteritinib + Aza vs Aza in ND mFLT3-AML ineligible for IC, N=145 NS Primary Endpoint OS: 9.82 vs 5.87, HR: 0.916; P = .753, CRc: 58.1% vs 26.5% (P <.001.) QUANTUM-First: Quizartinib vs Placebo + Standard Chemotherapy in ND FLT3-ITD+ AML Phase III, N=539, Superior OS (Primary Endpoint): 31.9 vs 15.1mo, HR: 0.776; P = .0324 (2-sided) Improved RFS, reduced CIR, and longer duration of CR, fatal TEAEs: 11.3 vs 9.7% AML19: CPX-351 vs FLAG-Ida for younger patients with high-risk AML; Phase III, N=195 Exploratory analysis: Similar OS and EFS but longer duration of CR with CPX-351 AGILE: Phase III Trial of Ivosidenib + Aza vs Placebo + Aza in ND IDH1-Mutant AML ≥ 75yrs, N=200 EFS: HR: 0.33; P = .0011, mOS: 24 vs 7.9 mo, HR 0.44, p = 0.0005, improved QOL, linfections Venetoclax/Decitabine for Adults <60 With ND ELN Adverse-Risk AML: Phase II, N=27 CRc after 1 cycle: 76% vs 38% , and infections 48% vs 67% for historical controls, MRD: 64% Azacitidine, Venetoclax, and Magrolimab in ND and R/R AML, N=48, Phase 1b/ll Macrophage immune checkpoint CD47 inhibitor (DON'T EAT ME!): Similar CR and ORR in mTP53/WT: CR: 64%/64%, ORR: 86%/100%, CR/CRi ven-naive: 63% vs ven-exposed 20% Gilteritinib + Venetoclax for FLT3-Mutated R/R AML, N=54, Phase Ib Overall mCRc 74.5%, and 78.1% previously treated with a TKI Clearance of FLT3 allelic burden (<10<sup>-2</sup>): 60% mFLT3-ITD achieved mCRc, with longer OS

### **MYELODYSPLASTIC SYNDROME**

- Sabatolimab + HMA for vHR/HR-MDS and ND-AML: Phase 1b, N=101, Humanized Monoclonal Antibody Targeting TIM-3
- TIM-3: coinhibitory immuno-myeloid receptor overexpressed in AML/MDS.
- vHR/HR-MDS: ORR, 56.9%; mDoR, 17.1 mo, ND-AML: ORR, 42.5%; mDoR, 12.6 mo
- Venetoclax/Azacitidine in Treatment-Naive HR-MDS, N=78 Phase Ib
- ORR: 84%, CR: 35%, mCR: 49%, Reductions of VAFs across the mutational spectrum
- CPX-351 in ND Higher-Risk MDS, N=31, Phase Ib
- ORR: 87%, CR: 52%: 49%, 29% allo-HSCT, 4 deaths

#### Ven/Aza for TN-HR-MDS

Molecular responses in CR or mCR pts at time of 2nd sample

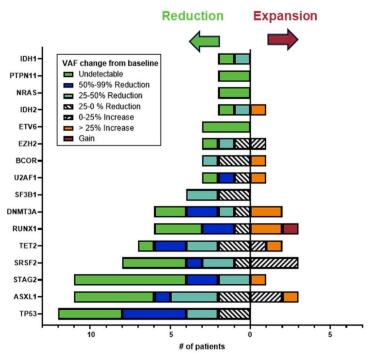


Figure. VAF dynamics in samples collected from patients in CR or mCR at the time of sample acquisition compared to baseline samples collected from bone marrow or the peripheral blood.

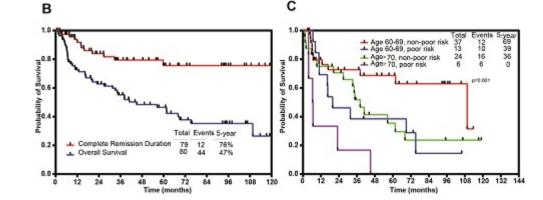
### **ACUTE LYMPHOBLASTIC LEUKEMIA**

#### <u>Mini-HyperCVD + Inotuzumab Ozogamicin ±</u> <u>Blinatumomab in Older Adults With ND Ph-</u> <u>Negative B-Cell ALL: Updated Phase II Results</u>

- ORR: 99%, CR:89%, CRp:8%, CRi: 1%
  Approximately one half of patients alive after 5 yr, with highest 5-yr
  OS rate in subgroup aged 60-69 yr without poor-risk cytogenetics
  VOD occurred in 8% of patients
  Study has been amended to omit
- chemotherapy in patients aged ≥70 yr

#### EHA2022: Abstract P355

Characteristics	Category	N (%) / median [range]
Age (years)		68 [60-87]
	≥70	30 (38)
Performance status	≥2	10 (13)
WBC (x10%/L)		3.1 [0.3-111.0]
Karyotype	Diploid	26 (32)
	HeH	5 (6)
	Ho-Tr	12 (15)
	Tetraploidy	3 (4)
	Complex	3 (4)
	t(4;11)	1 (1)
	Misc	15 (19)
	IM/ND	15 (19)
CNS disease at diagnosis		4 (5)
CD19 expression		99.5 [26-100]
CD22 expression		96.9 [27-100]
CD20 expression	≥ 20%	44/73 (60)
TP53 mutation		24/61 (39)



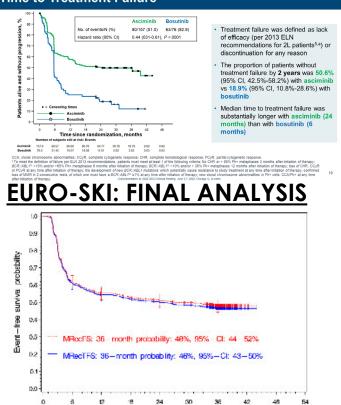
### CHRONIC MYELOID LEUKEMIA

#### ASCEMBL: Asciminib vs Bosutinib for CML-CP Previously <u>Treated With ≥ 2 TKIs, Phase III, N=233</u>

- Asciminib: first-in-class STAMP inhibitor,
- 96-week update: Sustained superior efficacy: MMR 37.6% vs 15.8%, BCR-ABL1<sup>IS</sup> ≤1%: 45.1% vs 19.4%
- Low-Dose Dasatinib vs Standard-Dose Dasatinib in ND CP-CML: Propensity Score Analysis: N=233
- 4 yr FFS, EFS, OS: 89 vs 79, 95 vs 72, 97 vs 92% (NS)
- 36-mo MMR4.5: 77 vs 62% (P=0.21)
- EURO-SKI Trial: FINAL Analysis of a PAN European STOP Tyrosine Kinase Inhibitor Trial in CML: N = 728
- mDoR of MR4 before TKI cessation 4.7 years
- MRecFS @ 36 mos: 48%, MRecTFS: 46%. No blast crisis

#### **ASCEMBL: 96-weeks Outcomes**

#### Time to Treatment Failure



Months since discontinuation of TKI

### **LYMPHOMA**



POLARIX: Polatuzumab Vedotin + R-CHP vs R-CHOP in Previously Untreated DLBCL, Phase III, N=879, IPI ≥2

• INT/high-risk DLBCL, PV+R-CHP vs R-CHOP, PFS: 76.7% vs 70.2%, HR: 0.73 (P <.02), OS; NS HR: 0.94

Alliance 051701: DA-EPOCH-R ± Venetoclax in Previously Untreated Double-Hit DLBCL, Phase II/III, N=73

• ORR (ITT): DA-EPOCH-R: 73% vs 58%: (Eval) 79% vs 88%, Ven + DA-EPOCH-R associated with excess TRAE

ZUMA-7: Trial of 2L Axicabtagene Ciloleucel vs SoC in R/R DLBCL, Phase III, RCT, N= 359

24-mo EFS: 40.5% vs 16.3%, HR 0.398, p = <0.0001, CR: 65% vs 32%, PR: 18% vs 18%, P= <0.0001, Improved PFS (HR 0.49), OS 52% vs 42% NS (HR 0.73; P=0.054), Grade III ICANS: 0, CRS 44.4%, Grade 3/4: 2.2%.</li>

**BELINDA: Tisagenlecieucel vs Standard of Care as Second-line Treatment for R/R DLBCL, Phase III, N=322** 

• ORR: 62% vs 86% @ 6 weeks, and 75% vs 68% @12 weeks, no significant impact on EFS vs SoC

<u>TRANSFORM: Lisocablagene Maraleucel vs Salvage Chemotherapy Followed by ASCT as Second-Line</u> <u>Treatment in Relapsed/Refractory Large B-Cell Lymphoma, Phase III, N=184</u>

• CR: 66% vs 39%; P <.0001, PFS: HR: 0.406; P = 0.0001, OS data immature at cutoff

## **LYMPHOMA**



Mosunetuzumab, R/R Follicular Lymphoma: Pivotal Phase II Trial N=90, CD20 x CD3 bispecific antibody ORR 80%, CR 60%, mPFS: 17.9 mo, ICANS: Grade1-2, CRS: 44.4%, Grade 3-4: 2.2%, OP, FD regimen (17) <u>Glofitamab + Obinituzumab x 1, R/R DLBCL, Pivotal Phase II, N=155, Primary Endpoint: CR, q21 x12 cycles</u> CD20/CD3 bispecific antibody with 2:1 binding structure, CR: 39.4%, mPFS: 4.9 mo, mOS: 11.9 mo Valemetostat, R/R ATCL: Pivotal Phase II, N=25: EZH1/EZH2 Inhibitor, ORR 48.0% GEMSTONE-201: Sugemalimab, PD-1 inhibitor, R/R Extranodal Natural killer/T cell lymphoma, Phase II, N=80 IRRC, ORR was 46.2%; 29 (37.2%) CR; mDoR: NR; 12-mo DoR rate: 86% MRD and CT Imaging Surveillance Following First-line Treatment in DLBCL: Prospective Evaluation (N=38/43) Lead time before clinical relapse: 3 mo, 44% of relapses radiographically detected asymptomatic. ECHELON: Brentuximab Vedotin + AVD vs ABVD in High-Risk (Stage III/IV) cHD: Phase III, N =1334 **<u>FINAL ANALYSIS</u>**: Superior 6-year overall survival: 93.9% vs 89.4% (HR: 0.59; Log Rank P = 0.009)

### **LYMPHOMA**

#### SHINE: First-line Ibrutinib + BR Followed by IR Maintenance in Older Patients With MCL, Phase III, N=523

- 7-year PFS:80.6 vs 52.9%, HR 0.75 (0.59-0.96), P=0.011, similar OS, TTNT: 19.9% vs 40.5%, improved mPFS. Median age 71years.
- Median PFS: Improved by 2.3 years, OS 57% vs 55% (HR1.07 (0.81-1.4)

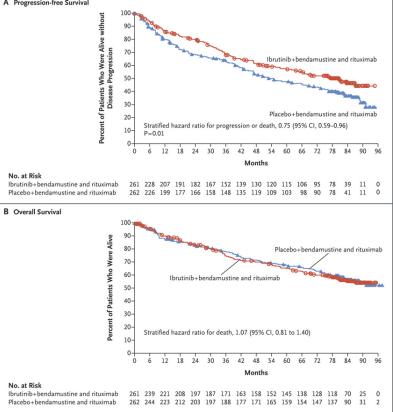
#### <u>CITADEL-205: Parsaciisib in BTKi–Naive R/R MCL, Phase II, N=108, PI3K5</u> inhibitor (No prior P13Ki)

• ORR 70.1%, CR 18%, mDoR: 12.1 mo, mPFS: 13.6 mo, Grade 3/4 colitis: 3.1/3.1%, discontinuations: diarrea 16%, colitis 6.5%

ASPEN, Zanubrutinib vs. Ibrutinib in Waldenström's Macroglobulinemia, Phase III, N=53, Subset Analysis, Efficacy in Patients With CXCR4<sup>mut</sup>:

► ≥VGPR: 7% vs 2%, 42-mo PFS 30% vs 19%

### SHINE: NEJM, Wang et al, 2022





# **CHRONIC LYMPHOCYTIC LEUKEMIA**

#### CLL: First-line Therapy

- GAIA/CLL13: FD First-line Venetoclax + Anti-CD20 Ab ± Ibrutinib vs FCR, Phase III, N=920 (FD: 12 mos)
- mPFS: I + V+ O vs CIT, NR vs 52.0 mo (HR 0.32; P <.000001; IVO vs CIT: uMRD: 86.5% vs 52.0% (P <.0001)</li>
- SEQUOIA: Zanubrutinib vs Bendamustine and Rituximab in First-line CLL/SLL, Phase III, N=479
- 24-mo PFS: 85.5% vs 69.5%; HR: 0.42; P <.0001), improvement accross risks subgroups, AF 3.3% vs 2.6%</li>
- GLOW: MRD with First-line FD Ibrutinib + Venetoclax vs Chlorambucil + Obinutuzumab, Phase III, N=211
- UMRD NGS <10<sup>-4</sup>: BM/PB; 51.9/54.7% vs 17.1/39% (BM P<.0001), <10<sup>-5</sup>: BM/PB; 40.6/43.4% vs 7.6/18.1%
- ELEVATE-TN: 5-Yr Update of Acalabrutinib ± Obinutuzumab vs Obinutuzumab + Chlorambucil, N=535
   60-mo PFS: 84% vs 72%, OS: 90% vs 82%, A + O vs O + Clb (HR: 0.55; P = .0474)

BTKi versus BTKi in Relapsed/Refractory Chronic Lymphocytic Leukemia (Non-Covalent BTK Inhibitors)

- MK-1026 in R/R CLL/SLL, BTKi with C481/PLCy2 activity, Phase II, N=121: ORR: 57.9%, DoR: NE
- BRUIN: Pirtobrutinib in R/R CLL/SLL, Phase I/II, N=121: ORR: 62%: similar irrespective of BTKi resistance

## **Multiple Myeloma: NDMM**

- DETERMINATION: VRd ± ASCT with Maintenance Lenalidomide in NDMM, Phase III, N=722
- Improved mPFS: 67.5mo vs 46.2 mo, 5-yr OS rate: 80.7% vs 79.2%, MRD-negative rate: 54.4% vs 39.8%
- 5-yr PFS similar for MRD-negative responses with VRd + ASCT vs VRd: 53.5% vs 59.2%
- <u>GMMG-HD7: Isatuximab + VRd vs VRD in TE-NDMM, Phase III, N=662, Primary endpoint: end-of-induction @ 18 weeks (EOIT) MRD negativity (MRD-10<sup>-5</sup>);
  </u>
- ITT MRD-10<sup>-5</sup>: 50.1% vs 35.6%, OR 1.83; (P <.001),  $\geq$  VGPR: 77.3% vs 60.5% (p <0.001)
- <u>GRIFFIN: Dara + VRd/Dara-R Maintenance vs VRd with R Maintenance for TENDMM, Phase II, N=207</u>
- 2-yr Maintenance sCR: 66% vs 47.4% (P = .0096), MRD-10<sup>-5</sup>: 64.4 vs 30.1% (P < .0001);
- MRD-10<sup>-6</sup>: 35.6% vs 14.6% (P = .0007)
- DREAMM-9: Belantamab Mafodotin + VRd in TI-NDMM, Randomized Phase I, N=144
- >VGPR in >50% all cohorts, 7/9 treated @ 1.9 mg/kg Q3/4W + VRd MRD negative after VGPR
- GEM2014MAIN: Maintenance With Ixazomib + Len/Dex vs Len/Dex After VRd + ASCT, Phase III, N=332
- 5-yr PFS: 62% vs 63% (P = .785), MRD negative at 2 yr associated with improved PFS, (P < .0001)</li>

# <u>Relapsed/Refractory Multiple Myeloma</u>

#### **BiSpecific Antibody Therapy in R/R MM**

- MajesTEC-1: TECLISTAMAB: BCMA x CD3 Bispecific Antibody in R/R Myeloma: Phase I/II, N=165
- ORR: 63%; ≥ CR: 39.4% m DoR: 18.4 mo, mPFS: 11.3 mo
- **<u>REGN5458</u>**; <u>BCMA x CD3 Bispecific Antibody in R/R Myeloma, Phase I/II, N=73</u>; ORR 75%, VGPR ≥58% @ 200-800 mg doses
- <u>MagnetisMM-3: BCMA-CD3 Bispecific Antibody Elranatamab in R/R Myeloma, Phase II, N=94:</u> ORR 60.6%, PFS 89.5% @ ~4mo
- Cevostamab: FcRH5 x CD3 Bispecific, Phase I, N=53, Prior BCMA Rx: 33.5%, Prior CAR-T: 17.5%
- ORR≥3.6/20-mg dose: 53.0%,12% sCR, 6% CR, 15% VGPR, 21% PR, mDoR: 11.5 mo, C1-dd ↓CRS risk

#### **CAR-T THERAPY**

- GC012F: BCMA/CD19 dual-targeted CAR T-cell therapy, Phase I, N=24
- Manufactured in 22-36 hr (FastCAR platform), ORR: 89.3, sCR/CR: 75%, CRS: G3;7%, G4;0, ICANS;0
- MCARH109: GPRC, D-targeted CAR T, Phase I, N=19: ORR: 69%, BM-MRD-10<sup>-5</sup> 50%, ≥75%-80% prior BCMA Rx
- **<u>3rd GENERATION iMID:</u>**
- <u>CC-220-MM-001 Iberdomide + Dexamethasone, Phase 1b/IIa, N=135</u>; RR similar after BCMA therapy.
- ORR: 26.2%,1 sCR, 7.5% VGPR,17.8%, CBR: 36.4%, DCR: 79.4%, mDoR 7mo, mPFS: 3mo, OS: 11.2mo

### **MYELOPROLIFERATIVE NEOPLASMS**

- MANIFEST: Pelabresib (CPI-0610) novel first-in-class, selective, BET inhibitor, monotherapy, Phase II, N=86
- Arm 1: MF Patients intolerant, or refractory or not candidates for JAK inhibition: SVR35: 11%, SVR25: 20%
- BM fibrosis improved by 1 grade in 16.7% and by  $\geq$ 2 grades in 6.7%, with 71% hemoglobin response
- Rustertide in Phlebotomy-Dependent PV, Phase II, N= 63, hepcidin mimetic ("Medical Phlebectomy")
- 84% phlebotomy elimination during the 28-wk treatment period, and improvement of MPN-TSS.
- Rapid, sustained, durable hematocrit control without an increase in WBC count or PV-related thromboses, and <20% increases in platelets. No increased risk of malignancy, FDA clinal hold lifted.</li>
- FIGHT-203: Phase II Trial of Pemigatinib in Myeloid/Lymphoid Neoplasms With FGFR1 Rearrangement
- Pemagitinib FGFR1-3 inhibitor, Rare hematologic neoplasm involving TKI fusion genes with eosinophilia
- INV-assessed-CR: 64.5%; CCyR: 72.7%, CRC-assessed CR: 72.7%; CCyR: 75.8%, CR CP 88.9% vs BP; 61.5%
- MOMENTUM: Momelotinib versus Danazol in Anemic MF patients after prior Ruxolitinib, Phase III, N=130
- MMB superior to DAN: SVR-35: 23.1 vs 3.1% (p= .0006), improved symptoms and transfusion requirements.

# **BENIGN AND NON-MALIGNANT HEMATOLOGY**



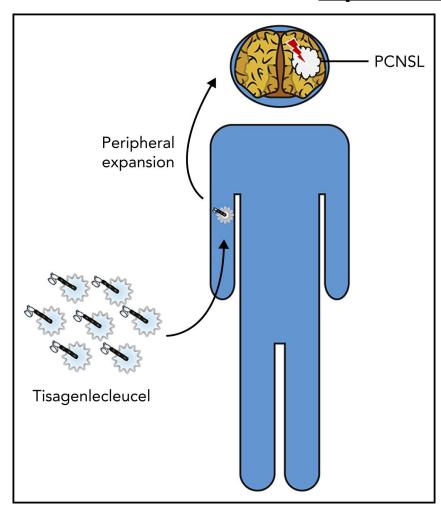
- Mitapivat; Novel, Oral, Small-molecule Activator of Pyruvate Kinase (PKR) in Sickle Cell Disease, Phase I, N=17
- Hb increased by ≥1 g/dL in 56% of patients, with improved hemolysis, ↑2,3-DPG and ↓ATP levels, with
  increases in oxygen affinity and decreased sickling
- Etavopivat Novel Small-molecule Allosteric Activator of PKR, in Sickle cell Disease, Phase I, N=35
- Improved markers of RBC health; RBC enzyme activity; sickle cell deformability; membrane damage; and SCD pathophysiology.
- SOLACE-kids: Crizanlizumab in Adolescents With Sickle Cell Disease, Phase II, N=50
- Humanized mAb to P-selectin, clinically relevant reduction in the median annualized rate of VOC.
- Iptacopan in PNH, Phase II, N=13, first-in-class, oral, selective inhibitor of factor B
- Improved hemolysis: LDH levels reduced by  $\geq 60\%$  vs baseline in all patients by Wk 12, maintained 52 wks
- ATLAS-INH: Fitusiran Prophylaxis vs BPA in Patients With Hemophilia A/B With Inhibitors, Phase III, N=57
- Antithrombin-directed siRNA therapeutic
- Median ABR: 0.0 vs 16.8% (p<.0001), with improved HR-QoL</li>

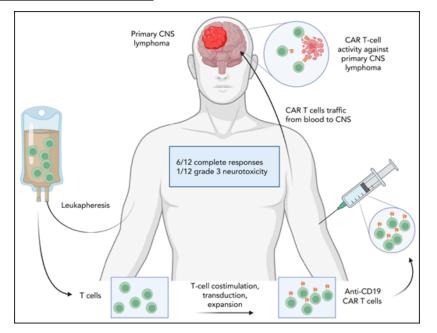


# Hematopoietic Stem Cell and Cellular Therapy

- Validation of Amphiregulin as a Monitoring Biomarker for aGVHD: Databases: UMN and REACH1, N=101.
- High baseline AREG associated with poor OS, and day 28 response associated with OS
- Urinary-Derived Human Chorionic Gonadotropin/Epidermal Growth Factor for Life-threatening Acute GVHD, N=44, Phase II: Improves immune tolerance, inflammation, microbiota, tissue repair, anabolic effects. Day 28 CR: 57%, 2-yr OS: 67% vs 12% for responders vs nonresponders (P <.01)</li>
- Axatilimab Refractory cGVHD, High-affinity anti-CSF-1R humanized IgG4 antibody, N=40
- ORR: 68%, 53% clinically meaningful improvement in symptoms by LSS
- Abatacept for Steroid-Refractory Chronic GVHD, Phase II, N=49
- Selective co-stimulation modulator targeting CD80 and CD86 on APCS. ORR: 49%, CR: 0%, PR: 49%.
- ELARA: Tisagenlecleucel in HR/R Follicular NHL, Phase II, N=97: ORR: 86%; CR: 69%; 12-mo PFS: 67%
- IO-DAY DECITABINE VS '3+7' FOLLOWED BY ALLOGRAFTING IN AML PTS ≥60 YRS: PHASE III, N=606
- Similar mOS: 15 mo vs.18 mo, (HR=1.04, 95% CI]: 0.86-1.26; 2-sided p=0.68), better AE profile with DEC-10
- Axicablagene ciloleucel CAR T therapy in R/R Primary CNS DLBCL: N =12, CR: 50%, G3 : 1/12, 43% LTR

#### Safety and Efficacy of Tisagenlecleucel in Primary CNS Lymphoma: <u>A phase 1/2 clinical trial</u>





N =12, CR: 50%, G3 ICAN: 1/12 43%: Long Term Response

Frigault, M et al, Safety and Efficacy of Tisagenlecleucel in Primary CNS Lymphoma: A Phase 1/2 Clinical Trial, Blood, 2022, 139(15):2306-2315.





### <u>What does it all</u> <u>mean?</u>

### My thoughts

#### PRACTICE Changing:

- Teclistimab in R/R Myeloma
- Pemagitinib FGFR1-inhibitor in FGFR-1 mutant hematologic neoplasms
- Ibrutinib +BR as initial therapy in Mantle Cell Lymphoma
- Brentuximab + AVD in Stage III/IV Hodgkin's Lymphoma
- FIXED DURATION THERAPY IN CLL: Ibrutinib and Venetoclax
- CART-T Therapy as SECOND-LINE THERAPY in TE-Relapsed DLBCL

#### Practice Confirming

- Autologous Stem Cell Transplantation in Myeloma
- Potentially Practice Changing:
- Polatuximab Vedotin + CHP in High Risk DLBCL
- Quizartinib + Standard Chemo in mFLT-3-ITD AML
- Ivosidenib + Aza in Elderly (≥75yrs) IDH1-mutant NDAML
- Non-covalaent BTKi in R/R CLL: Pirtobrutinib and MK-1026
- Mosunetuzumab in DLCBL
- TKI discontinuation for CML in MR4 with close monitoring
- <u>Stay Tuned</u>
- Margrolizumab in TP53 mutant AML
- Bispecific antibodies in R/R lymphoma and RRMM
- Parsaclisib in Relapsed Mantle Cell Lymphoma
- CPX-351 and Venetoclax in MDS
- Pyruvate Kinase Activators in SCD
- CAR-T Cellular Therapy: Primary CNS Lymphoma

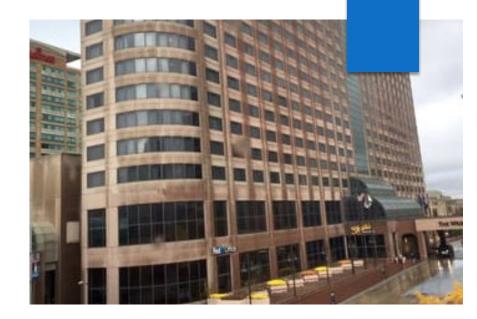
## **SAVE THIS DATE** !

#### 20<sup>th</sup> Annual Indy Hematology Review 2022

(http://www.indyhematologyreview.com)

<u>March 18<sup>th</sup>, 2023</u> Westin Indianapolis, Indianapolis, Indiana, 46204









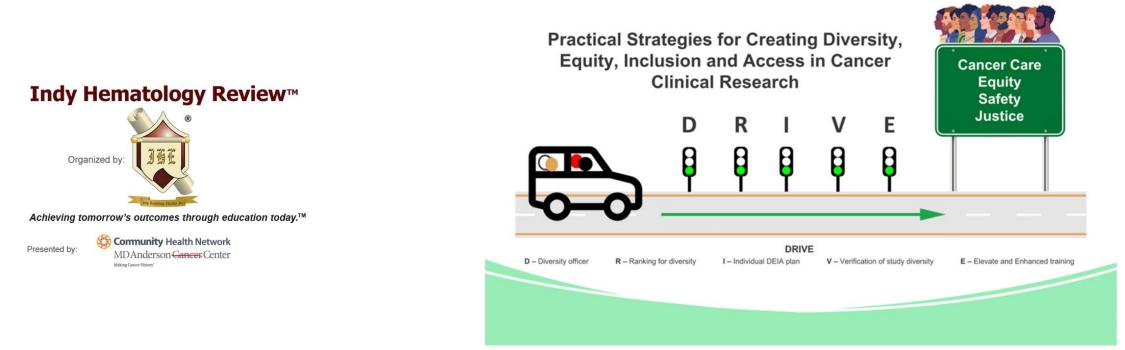




# And The Winners are ....

## Announcements and Acknowledgments

### Support Diversity, Equity, Inclusion and Access in Cancer Research at #DRIVEWITHIHE



### Indy Hematology Clinical Rounds®



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#### ming Quarterly

inical Rounds® on program

cases to your peers in a live tumor mendations and treatment options.

Visit: Indyhematologyreview.com for details Next Meeting: October 26, 2022: Focus on Multiple Myeloma Faculty: Saad Usmani, MD, MBA, Chief of Myeloma Service, MSKCC

### <u>Co-Chair Indy</u> <u>Hematology Review</u> <u>Challenging Cases</u>

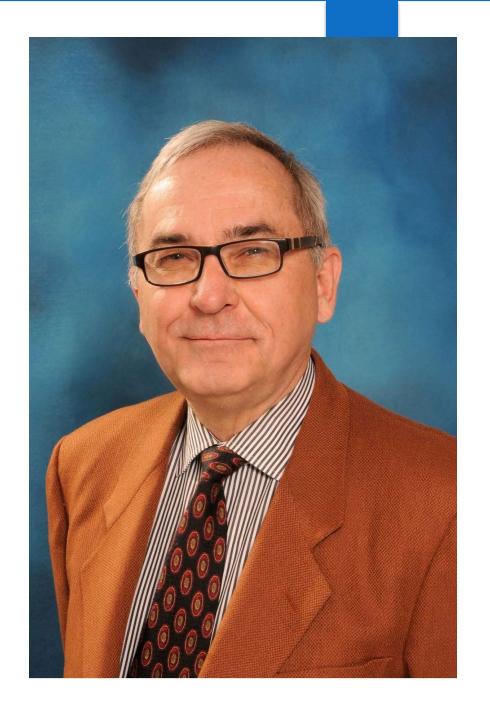
#### MICHAEL C. WIEMANN, MD, FACP

PRESIDENT, CLINICAL ST. JOHN PROVIDENCE PHYSICIAN NETWORK

#### DETROIT, MICHIGAN

CLINICAL PROFESSOR OF MEDICINE, MCHIGAN STATE SCOOL OF MEDICINE, EAST LANSING, MI





### T. Howard Lee Keynote Lecture



<u>Sonali M. Smith, MD</u> Elwood V. Jensen Professor of Medicine Chief of Hematology/Oncology, University of Chicago, Chicago, IL





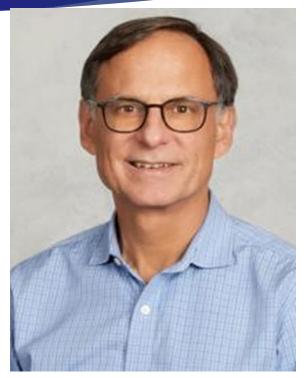
<u>T. HOWARD LEE, MD</u> Founder and President Emeritus, Hematology Oncology of Indiana, PC Indianapolis, IN

### ANNUAL STEVEN COUTRE CHRONIC LYMPHOCYTIC LEUKEMIA <u>MEMORIAL LECTURE:</u> WHAT WOULD STEVE DO? TREATMENT OF CLL IN 2022



Adrian Weistner, MD, PhD Bethesda, MD





Steven Coutré, MD, Fomerly Professor of Medicine Stanford University School of Medicine Stanford, CA

# INDY HEMATOLOGY REVIEW 2022 SCHOLARSHIP RECIPIENT

#### Tirumebet Mezgebu Minayehu, MD

Clinical hematologist and Unit Head at the Department of Internal medicine, Division of Hematology,

Saint Paul's Hospital Millennium Medical College,

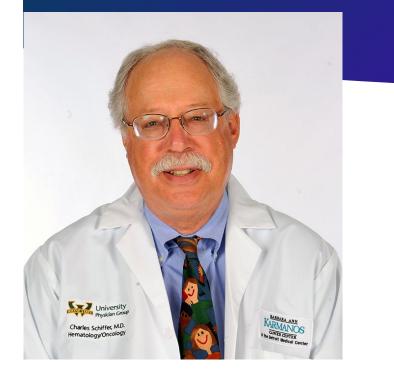
Addis Ababa, Ethiopia







### Hematologic Malignancies Town Hall



Charles Schiffer, MD Emeritus Professor of Oncology and previously the Joseph Dresner Chair for Hematologic Malignancies Wayne State University School of Medicine Detroit, MI



Saad Usmani, MD, MBA Chief of Myeloma Service, Memorial Sloan Kettering Cancer Center, Attending Physician, Myeloma, Cellular Therapy and Adult BMT Services New York, NY



Rami Komrokji, MD Vice Chair of the Malignant Hematology and Head of the Leukemia and MDS Section at the Moffitt Cancer Center Tampa Professor in Medicine & Oncologic Sciences at the College of Medicine, at the University of South Florida in Tampa, Florida.



## <u>Minimal Residual Disease; Myeloma,</u> Lymphoma, Leukemia



Sonali M. Smith, MD Elwood V. Jensen Professor of Medicine Chief of Hematology/Oncology, University of Chicago, Chicago, IL



Saad Usmani, MD, MBA Chief of Myeloma Service, Memorial Sloan Kettering Cancer Center, Attending Physician, Myeloma, Cellular Therapy and Adult BMT Services New York, NY



Rami Komrokji, MD Vice Chair of the Malignant Hematology and Head of the Leukemia and MDS Section at the Moffitt Cancer Center Tampa Professor in Medicine & Oncologic Sciences , College of Medicine, University of South Florida in Tampa, Fl

# Nursing and Allied Health Symposium

#### **Moderators**

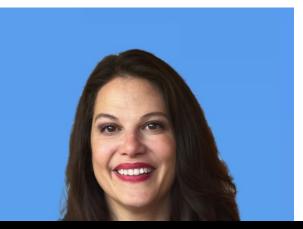
Thalia Hammond Donna M. Birhiray, OTR, MBA





#### David Reeves, PharmD, BCOP

Associate Professor, Butler University and Clinical Pharmacist at Franciscan Hospital,



Sandra Garofalo, MS, APRN, AOCNP Nurse Practitioner, Hematology Oncology of Indiana/AON, Indianapolis, IN

### MULTIPLE MYELOMA: THE CURE AROUND THE CORNER

#### Kenneth Anderson, MD

PAST PRESIDENT AMERICAN SOCIETY OF HEMATOLOGY 2017

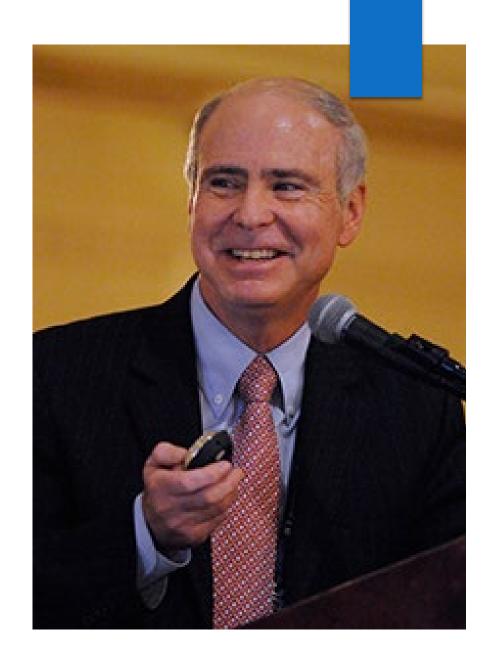
Kraft Family Professor,

Harvard Medical School, Myeloma

Program Director and Chief, Division of Hematologic Neoplasia,

Dana Faber Cancer Institute, Boston, MA





# WALDENSTRÖM'S MACROGLOBULINEMIA

#### Steven P. Treon, MD, MA, PhD, FACP, FRCP

Director,

Bing Center for Waldenström's Macroglobulinemia Professor of Medicine, Harvard Medical School, Boston, MA





### AMYLOIDOSIS

Morie Gertz, MD, MACP

Roland Seidler Jr. Professor, Art of Medicine

Chair Emeritus, Department of Internal Medicine, Mayo Clinic Rochester, MN





# CHRONIC MYELOID LEUKEMIA

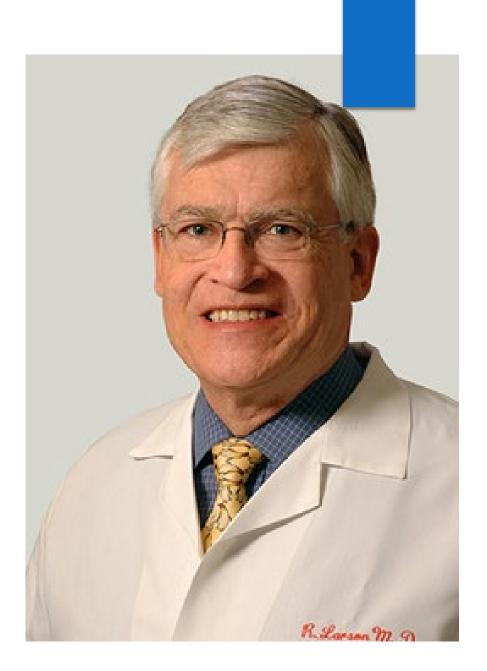
#### Richard A. Larson, MD

Professor of Medicine,

Director of the Hematologic Malignancies Clinical Research Program, University of Chicago,

Chicago, Illinois



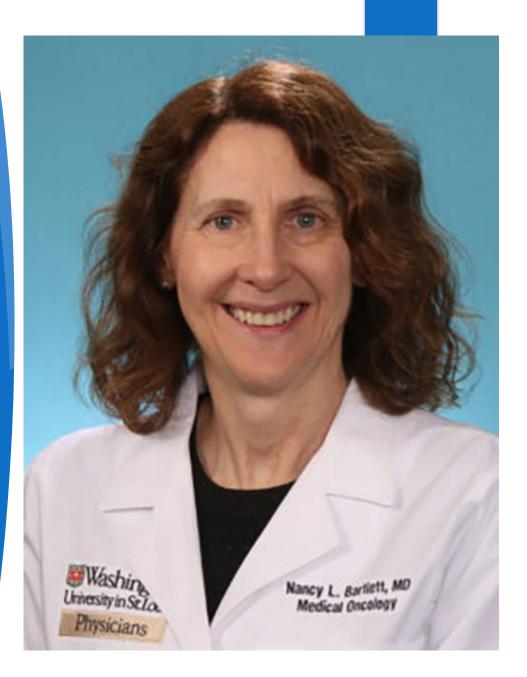




#### Nancy Bartlett, MD

Professor of Medicine Department of Medicine Washington University and Koman Chair in Medical Oncology St. Louis, MO





### AGGRESSIVE B AND T CELL LYMPHOMAS: EMERGING THERAPIES

#### John P. Leonard, M.D.

Richard T. Silver Distinguished Professor of Hematology and Medical Oncology and Senior Associate Dean for Innovation and Initiatives at Weill Cornell Medicine.

Executive Vice Chairman of the Weill Department of Medicine at Weill Cornell Medicine and NewYork-Presbyterian Hospital, New York, NY



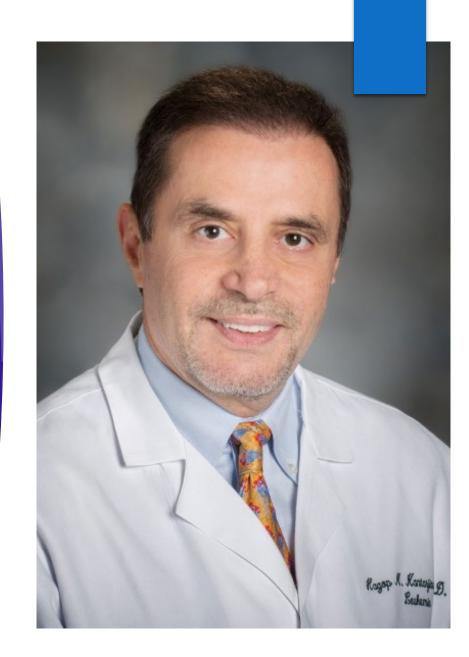


# <u>Acute Lymphoblastic</u> <u>Leukemia</u>

#### Hagop Kantarjian, M.D.

Professor and Samsung Distinguished Leukemia Chair, Department of Leukemia The University of Texas MD Anderson Cancer Center, Houston, TX





### BENIGN HEMATOLOGY: CLOTTING, BLEEDING AND MORE

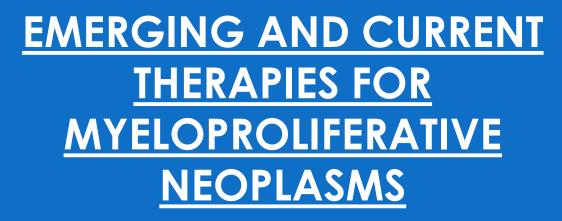
#### Craig Kessler, MD

Professor of Medicine and Pathology,

Attending Physician, Division of Hematology-Oncology, Georgetown University Medical Center, Director, Division of Coagulation, Department of Laboratory Medicine and Director of the Therapeutic and Cellular Apheresis Unit. Washington, DC







#### Ruben Mesa, MD, FACP

Executive Director of the Mays Cancer Center, UT Health San Antonio MD Anderson Cancer Center (Boerne, TX))





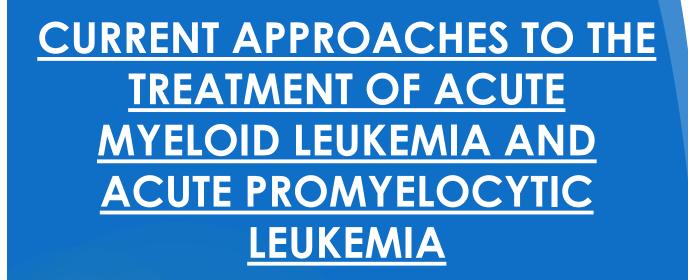
### MYELOPROLIFERATIVE NEOPLASMS: PROGNOSTICATION AND THERAPEUTIC IMPLICATIONS

#### Ayalew Tefferi, MD

Barbara Woodward Lips II Professor of Medicine at the Mayo Clinic (Rochester, MN)





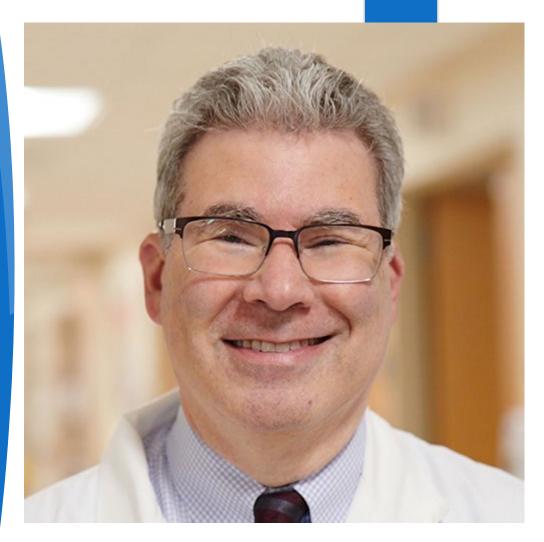


#### Martin Tallman, MD

Director of Faculty Mentorship and Career Development at Lurie Cancer Center of Northwestern University

2021 PRESIDENT, AMERICAN SOCIETY OF HEMATOLOGY





### <u>MYELODYSPLASTIC</u> <u>SYNDROME: EMERGING AND</u> <u>TARGETED THERAPIES</u>

#### <u>Richard Stone, MD</u>

Professor of Medicine

#### Chair Leukemia Committee ALLIANCE

Chief of Staff and Director of Translational Research for the Adult Leukemia Program at Dana-Farber, and Harvard Medical School, Boston, MA





### HEMATOPOIETIC STEM CELL TRANSPLANTATION AND CELLULAR THERAPY

Richard Childs, MD Bethesda, MD







#### Indy Hematology Review™

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### **REFERENCES**

#### 1. ACUTE MYELOGENOUS LEUKEMIA

- 2. Wang. ASH 2021. Abstr 700.
- 3. Montesinos. ASH 2021. Abstr 697
- 4. Erba. EHA 2022. Abstr \$100.
- 5. Russell. EHA 2022. Abstr \$128
- 6. Chen. ASH 2021. Abstr 35.
- 7. Daver. ASH 2021. Abstr 371.
- 8. Daver. ASH 2021. Abstr 691.
- 9. Mato AR et al. Lancet. 2021:892-901.

#### 10. <u>MDS</u>

- 11. Brunner. ASH 2021. Abstr 244.
- 12. Garcia. ASH 2021. Abstr 241
- 13. Peterlin. ASH 2021. Abstr 243.
- 14. Kremyanskaya. ASH 2021. Abstr 141
- 15. Hoffman. ASH 2021. Abstr 388
- 16. ACUTE LYMPHOBLASTIC LEUKEMIA
- 17. Haddad. EHA2022: Abstract P355
- 18. CHRONIC MYLOGENOUS LEKEMIA
- 19. Réa. ASCO 2022. Abstr 7004.
- 20. Sasaki. ASH 2021. Abstr 631.
- 21. Mahon. ASH 2021, Abstr 632.

### REFERENCES

#### <u>LYMPHOMA</u>

22.

23.

- Tilly. ASH 2021. Abstr LBA1. Tilly. NEJM. 2021;[Epub]
- 24. Abramson. ASH 2021. Abstr 523.
- 25. Locke. ASH 2021. Abstr 2.
- 26. Bishop. ASH 2021. Abstr LBA-6.
- 27. Budde. ASH 2021. Abstr 127.
- 28. Dickinson. ASCO 2022. Abstr 7500.
- 29. Yoshimitsu. ASH 2021. Abstr 303.
- 30. Huang. ASCO 2022, Abstr 7501.
- 31. Kumar. ASH 2021. Abstr 52.
- 32. Ansell. ASCO 2022. Abstr 7503.
- 33. Wang. ASCO 2022. Abstr LBA7502. Wang. NEJM. 2022; [Epub].
- 34. Mehta. ASH 2021. Abstr 382.
- 35. Dimopoulos. EHA 2022. Abstr P1161.

#### <u>CLL</u>

36.

38.

- 37. Eichhorst. EHA 2022. Abstr LB2365.
  - Tam. ASH 2021. Abstr 396
- 39. Munir. ASH 2021. Abstr 70.
- 40. Sharman. ASCO 2022. Abstr 7539.
- 41. Woyach. ASH 2021. Abstr 392.

### REFERENCES

#### MYELOMA.

42.

- 43. Richardson. ASCO 2022. Abstr LBA4, Richardson. NEJM. 2022; [Epub].
- 44. Goldschmidt. ASH 2021. Abstr 463.
- 45. Laubach. ASH 2021. Abstr 79.
- 46. Terpos. ASH 2021. Abstr 2736.
- 47. Rosiñol. ASH 2021. Abstr 466.
- 48. Nooka. ASCO 2022. Abstr 8007, Moreau. NEJM. 2022;[Epub].
- 49. Zonder. ASH 2021. Abstr 160.
- 50. Trudel. ASH 2021. Abstr 157.
- 51. Lesokhin . ASCO 2022. Abstr 8006
- 52. Du. ASCO 2022. Abstr 8005.
- 53. Lonial. ASH 2021. Abstr 162.
- 54. <u>MPN</u>
- 55. Kremyanskaya. ASH 2021. Abstr 141.
- 56. Hoffman. ASH 2021. Abstr 388.
- 57. Gotlib. ASH 2021. Abstr 385.
- 58. Verstovsek S.EHA 2022; Abtr S195
- 59. BENIGN HEMATOLOGY
- 60. Xu. ASH 2021. Abstr 10.
- 61. Kalfa. ASH 2021. Abstr 8
- 62. Heeney. ASH 2021. Abstr 12.
- 63. Jang. ASH 2021. Abstr 2173.
- 64. Young. ASH 2021. Abstr 4.
- 65. HEMATOPOIETIC STEM CELL THERAPY/CELLULAR THERAPY
- 66. Pratta. ASH 2021. Abstr 259.
- 67. Holtan. ASH 2021. Abstr 261.
- 68. Lee. ASH 2021. Abstr 263
- 69. Koshy. ASH 2021. Abstr 264.
- 70. Thieblemont. ASH 2021. Abstr 131.
- 71. Lübbert, EHA 2022, Abstract: \$125
- 72. Frigault MJ et al. Safety and efficacy of tisagenlecleucel in primary CNS lymphoma: a phase 1/2 clinical trial. Blood. 2022; 139(15):2306-2315.