Improved Survival in Patients With First Relapsed or Refractory Acute Myeloid Leukemia (AML) Treated With Vosaroxin Plus Cytarabine Versus Placebo Plus Cytarabine: Results of a Phase 3 Double-Blind Randomized Controlled Multinational Study (VALOR)

Vosaroxin: A First-in-Class Anticancer Quinolone Derivative (AQD)

Key Characteristics

- Intercalates DNA and inhibits topoisomerase II
- Causes replication-dependent, site-selective DNA damage, G2 arrest and apoptosis
- Not a P-gp substrate
- p53 independent activity
- Minimal metabolism and creation of ROS
- Lower potential for off-target organ damage (cardiotoxicity)
- Low risk of drug-drug interaction

**VALOR - Background**

- Potent cytotoxic activity against AML cell lines and primary AML samples\(^1,2\)
- Vosaroxin/ cytarabine is synergistic in cell lines and patient samples\(^1,2\)

### Phase 1/2 Vosaroxin + Cytarabine in Patients With First Relapsed or Primary Refractory AML (N=69)

<table>
<thead>
<tr>
<th></th>
<th>Median Overall Survival</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First relapse</td>
<td>6.9 months</td>
<td>7.2 months</td>
</tr>
<tr>
<td></td>
<td>Primary refractory</td>
<td>6.4 months</td>
<td></td>
</tr>
<tr>
<td>CR rate</td>
<td></td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>CR + CRp + CRi</td>
<td></td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Median LFS</td>
<td></td>
<td>25.2 months</td>
<td></td>
</tr>
<tr>
<td>30 day all-cause mortality</td>
<td></td>
<td>2.9%</td>
<td></td>
</tr>
<tr>
<td>60 day all-cause mortality</td>
<td></td>
<td>8.7%</td>
<td></td>
</tr>
<tr>
<td>HSCT rate among patients with CR/ CRp/ CRi</td>
<td></td>
<td>63%</td>
<td></td>
</tr>
</tbody>
</table>

VALOR
Phase 3 Randomized Double-blind, Placebo-controlled

1:1 Randomization
First Relapsed or Refractory AML
Stratifications:
- Age
- Disease Status
- Geography

Study Arm

VOSAROXIN
90\(\text{mg/m}^2\) days 1, 4 +
Cytarabine (IDAC)
1 g/m\(^2\) days 1-5

PLACEBO
days 1, 4 +
Cytarabine (IDAC)
1 g/m\(^2\) days 1-5

Control Arm

Induction (1-2 cycles)

CR or CRp

Consolidation (1-2 cycles)
CRI, PR or Treatment Failure

Survival Follow Up

Endpoints:
- Primary - Overall Survival (OS)
- Secondary - Complete Remission (CR), Safety, Tolerability
- Tertiary - CR+CRp+CRi, EFS, LFS, Transplant Rate

*After cycle 1, all subsequent cycles at 70 mg/ m\(^2\) vosaroxin on days 1 and 4
VALOR - Eligibility Criteria

• **Inclusion Criteria**
  • AML diagnosis by WHO criteria
  • ≥ 18 years
  • Refractory or first relapsed
    • Failure to achieve remission after up to 2 cycles of induction or CR1 duration < 90 days
    • Relapse ≥ 90 days to ≤ 24 months after first CR or CRp
  • ≤ 2 Cycles of induction (at least 1 cycle of cytarabine + anthracycline [or anthracenedione])
  • ECOG Performance Status 0, 1, or 2
  • Adequate cardiac, renal and hepatic function

• **Exclusion Criteria**
  • Acute promyelocytic leukemia
  • Completion of single cycle of treatment containing ≥ 5 g/ m² cytarabine within 90 days of randomization
  • Allogeneic or autologous SCT within 90 days of randomization
  • Active immunosuppressive therapy for GVHD
VALOR - Statistical Design

- Pre-planned adaptive study designed with opportunity to expand allowing identification of potential benefit

- Independent DSMB could recommend based on safety and efficacy data to:
  1. Stop early for efficacy (p<0.0015) or futility
  2. Continue to 450 evaluable patients (375 events)
  3. Make a pre-specified sample size adjustment to 675 evaluable patients (562 events)
### VALOR - Patient Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Vosaroxin / Cytarabine N (%)</th>
<th>Placebo / Cytarabine N (%)</th>
<th>Total N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Number</strong></td>
<td>N=356</td>
<td>N=355</td>
<td>N=711</td>
</tr>
<tr>
<td><strong>Age, median [range]</strong> *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;60 years</td>
<td>130 (37)</td>
<td>130 (37)</td>
<td>260 (37)</td>
</tr>
<tr>
<td>≥60 years</td>
<td>226 (63)</td>
<td>225 (63)</td>
<td>451 (63)</td>
</tr>
<tr>
<td><strong>Sex, (% )</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>(57)</td>
<td>(54)</td>
<td>(55)</td>
</tr>
<tr>
<td><strong>First Relapse Status</strong> *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refractory</td>
<td>152 (43)</td>
<td>149 (42)</td>
<td>301 (42)</td>
</tr>
<tr>
<td>Early Relapse (&gt; 90 days &lt; 12 mths)</td>
<td>127 (36)</td>
<td>129 (36)</td>
<td>256 (36)</td>
</tr>
<tr>
<td>Late Relapse (&gt; 12 mths &lt; 24 mths)</td>
<td>77 (22)</td>
<td>77 (22)</td>
<td>154 (22)</td>
</tr>
<tr>
<td><strong>Cytogenetics</strong> *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Favorable</td>
<td>7 (2)</td>
<td>9 (3)</td>
<td>16 (2)</td>
</tr>
<tr>
<td>Intermediate</td>
<td>175 (49)</td>
<td>155 (44)</td>
<td>330 (46)</td>
</tr>
<tr>
<td>Unfavorable</td>
<td>58 (16)</td>
<td>75 (21)</td>
<td>133 (19)</td>
</tr>
<tr>
<td>Missing/ Unknown</td>
<td>116 (33)</td>
<td>116 (33)</td>
<td>232 (33)</td>
</tr>
<tr>
<td><strong>Prior Stem Cell Transplant</strong> *</td>
<td>33 (9)</td>
<td>32 (9)</td>
<td>65 (9)</td>
</tr>
<tr>
<td><strong>Geographic, (% )</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>(45)</td>
<td>(45)</td>
<td>(45)</td>
</tr>
<tr>
<td>Non-US</td>
<td>(55)</td>
<td>(55)</td>
<td>(55)</td>
</tr>
</tbody>
</table>

VALOR - 2° Endpoint: CR Rates

CR = Complete remission

Overall: 30.1% (p<0.0001) vs 16.3% (p=0.24)

<60 years: 26.9% (p=0.24) vs 20.8% (p<0.0001)

≥60 years: 31.9% (p<0.0001) vs 13.8% (p=0.02)

Refractory: 20.4% (p=0.02) vs 10.7% (p=0.002)

Early Relapse: 27.6% (p=0.002) vs 12.4%

Late Relapse: 53.2% (p=0.01) vs 33.8%
VALOR - 2° Endpoint: CR+CRp+CRi Rates

CR = Complete remission
CRp = Complete remission with incomplete platelet recovery
CRi = Complete remission with incomplete recovery of platelets or neutrophils

CR+CRp+CRi Rates

<table>
<thead>
<tr>
<th>Group</th>
<th>Overall</th>
<th>&lt;60 years</th>
<th>≥60 years</th>
<th>Refractory</th>
<th>Early Relapse</th>
<th>Late Relapse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vosaroxin / Cytarabine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>59.7</td>
</tr>
<tr>
<td>Placebo / Cytarabine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36.4</td>
</tr>
</tbody>
</table>

- Overall: p<0.0001
- <60 years: p=0.04
- ≥60 years: p<0.0001
- Refractory: p=0.001
- Early Relapse: p=0.0004
- Late Relapse: p=0.004
VALOR - $1^{\text{st}}$ Endpoint: Overall Survival (OS)

Intent To Treat Population ($N = 711$)

- **Vos/Cyt**
  - Median (95% CI): 7.5 (6.4, 8.5)
  - Hazard Ratio (CI): 0.87 (0.73, 1.02)
  - Stratified Log Rank analysis, $p = 0.06$

- **Pla/Cyt**
  - Median (95% CI): 6.1 (5.2, 7.1)
  - Hazard Ratio (CI): 0.87 (0.73, 1.02)
  - Stratified Log Rank analysis, $p = 0.02$

The graph shows the survival probability over time for the two treatment groups. The Survival Probability is plotted on the y-axis, and Time (Months) is on the x-axis. The Kaplan-Meier survival curves for Vos/Cyt and Pla/Cyt are depicted, with censored cases indicated by dots. The median survival times and hazard ratios with confidence intervals are provided, along with statistically significant p-values.
VALOR - 3° Endpoint: Post-Treatment Transplant Rates

Overall Incidence of HCST = 210
Rate for younger patients approx. double for older patients

- **Overall**
  - (n=107/356) CR (n=51) 30.1
  - (n=103/355) CR (n=33) 29

- **<60 years**
  - (n=60/130) CR (n=24) 46.2
  - (n=59/130) CR (n=17) 45.4

- **≥60 years**
  - (n=47/226) CR (n=27) 20.8
  - (n=44/225) CR (n=16) 19.6

Percent (%) of Patients Receiving Transplant
VALOR - OS Censored for AlloSCT
(Preplanned Analysis)

Intent To Treat Population (N = 711)

Median (95% CI)

- Vos/Cyt: 5.3 (4.4, 6.3)
- Pla/Cyt: 6.7 (5.4, 8.1)

Hazard Ratio, 0.81

p = 0.02
## VALOR - Overall Survival by Strata, (Intent To Treat  N=711)

<table>
<thead>
<tr>
<th></th>
<th>Favors Study Arm</th>
<th>Favors Control Arm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Survival</td>
<td></td>
<td>Hazard Ratio (CI)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.87 (0.73, 1.02)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>711</td>
</tr>
<tr>
<td>Age &lt; 60 yrs.</td>
<td></td>
<td>1.08 (0.81, 1.44)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
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<tr>
<td></td>
<td></td>
<td>260</td>
</tr>
<tr>
<td>Age ≥ 60 yrs.</td>
<td></td>
<td>0.75 (0.62, 0.92)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>451</td>
</tr>
<tr>
<td>Refractory</td>
<td></td>
<td>0.87 (0.68, 1.11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>301</td>
</tr>
<tr>
<td>Early Relapse*</td>
<td></td>
<td>0.77 (0.59, 1.00)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>256</td>
</tr>
<tr>
<td>Late Relapse**</td>
<td></td>
<td>0.98 (0.66, 1.46)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>154</td>
</tr>
<tr>
<td>Relapse Combined</td>
<td></td>
<td>0.86 (0.69, 1.07)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>410</td>
</tr>
<tr>
<td>Location US</td>
<td></td>
<td>0.91 (0.71, 1.16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>320</td>
</tr>
<tr>
<td>Location Non-US</td>
<td></td>
<td>0.83 (0.67, 1.05)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
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<td></td>
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<td>391</td>
</tr>
</tbody>
</table>

* Early Relapse: relapse between 90 days and 12 months from previous response

** Late Relapse: relapse between 12 months and 24 months following previous response
VALOR - OS for Patients ≥60 Years of Age (Preplanned Analysis)

Intent To Treat Population (N = 451)

Survival Probability

Time (Months)

Median (95% CI)

- Vos/Cyt: 7.1 (5.8, 8.1)
- Pla/Cyt: 5.0 (3.8, 6.4)

Hazard Ratio (CI), 0.75 (0.62, 0.92)

p = 0.003
VALOR - OS for Patients <60 Years of Age
(Preplanned Analysis)

Intent To Treat Population (N = 260)

Median (95% CI)
- Vos/Cyt: 9.1 (6.2, 11.6)
- Pla/Cyt: 7.9 (6.1, 12.2)

p = 0.60

Hazard Ratio (CI), 1.08 (0.81, 1.44)
VALOR - OS for Refractory Patients
(Preplanned Analysis)

Intent To Treat Population (N = 301)

Survival Probability

Median (95% CI)
- Vos/ Cyt: 6.7 (4.2, 7.8)
- Pla/ Cyt: 5.0 (3.6, 6.3)

Hazard Ratio (CI), 0.87 (0.68, 1.11)

p = 0.23
VALOR - OS for Late Relapse Patients
(Preplanned Analysis)

Intent To Treat Population (N = 154)

Median (95% CI)
- Vos/Cyt: 14.1 (7.9, 22.6)
- Pla/Cyt: 12.3 (9.1, 18.4)

Hazard Ratio (CI), 0.98 (0.66, 1.46)

Survival Probability vs. Time (Months)

Censored
VALOR - OS for Early Relapse Patients
(Preplanned Analysis)

Intent To Treat Population (N = 256)

**Median (95% CI)**

- **Vos/Cyt**: 6.7 (4.6, 8.7)
- **Pla/Cyt**: 5.2 (3.6, 6.6)

**Hazard Ratio (CI)**, 0.77 (0.59, 1.00)

**p = 0.04**
VALOR - 3° Endpoint: Event Free Survival (EFS)

Time from randomization to treatment failure, relapse, or death due to any cause. ITT Population (N=711)

Median (95% CI)
- Vos/Cyt: 1.9 (1.6, 2.2)  
- Pla/Cyt: 1.3 (1.2, 1.4) 

Hazard Ratio (CI), 0.67 (0.57, 0.79) 

p = <.0001
VALOR - 3° Endpoint: Leukemia-Free Survival (LFS)

Time from CR to relapse or death due to any cause, without censoring for subsequent non-protocol therapy (including HSCT). Intent To Treat Population (N=165)

Survival Probability

0.00 0.25 0.50 0.75 1.00
0 6 12 18 24 30 36

Survival Probability vs Time (Months)

Median (95% CI)
Vos/Cyt 11.0 (8.3, NE) p = 0.63
Pla/Cyt 8.7 (65, 18.0)

Hazard Ratio (CI), 0.89 (0.57, 1.40)

Numbers of Subjects at Risk
Pla/Cyt 58 33 16 11 5 2 0
Vos/Cyt 107 55 30 17 11 7 0

NE = Not estimatable
## VALOR - Most Common Treatment-Emergent Adverse Events

<table>
<thead>
<tr>
<th></th>
<th>Vosaroxin / Cytarabine</th>
<th>Placebo / Cytarabine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=355</td>
<td>N=350</td>
</tr>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>Nausea</td>
<td>218 (61)</td>
<td>167 (48)</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>244 (69)</td>
<td>121 (35)</td>
</tr>
<tr>
<td>Febrile neutropenia</td>
<td>170 (48)</td>
<td>120 (34)</td>
</tr>
<tr>
<td>Constipation</td>
<td>136 (38)</td>
<td>141 (40)</td>
</tr>
<tr>
<td>Hypokalemia</td>
<td>170 (48)</td>
<td>102 (29)</td>
</tr>
<tr>
<td><strong>Stomatitis</strong></td>
<td><strong>174 (49)</strong></td>
<td><strong>66 (19)</strong></td>
</tr>
<tr>
<td>Vomiting</td>
<td>135 (38)</td>
<td>73 (21)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>107 (30)</td>
<td>94 (27)</td>
</tr>
<tr>
<td>Anemia</td>
<td>95 (27)</td>
<td>105 (30)</td>
</tr>
</tbody>
</table>

*>30% in any group (all grade)*
## VALOR - Grade 3/4 Treatment-Emergent Adverse Events

<table>
<thead>
<tr>
<th>Condition</th>
<th>Vosaroxin / Cytarabine N=355</th>
<th>Placebo / Cytarabine N=350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Febrile neutropenia</td>
<td>167 (47)</td>
<td>117 (33)</td>
</tr>
<tr>
<td>Thrombocytopenia</td>
<td>84 (24)</td>
<td>87 (25)</td>
</tr>
<tr>
<td>Anemia</td>
<td>78 (22)</td>
<td>81 (23)</td>
</tr>
<tr>
<td>Neutropenia</td>
<td>66 (19)</td>
<td>49 (14)</td>
</tr>
<tr>
<td>Hypokalemia</td>
<td>52 (15)</td>
<td>21 (6)</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>39 (11)</td>
<td>26 (7)</td>
</tr>
<tr>
<td><strong>Stomatitis</strong></td>
<td><strong>54 (15)</strong></td>
<td><strong>10 (3)</strong></td>
</tr>
<tr>
<td>Sepsis</td>
<td>42 (12)</td>
<td>18 (5)</td>
</tr>
<tr>
<td>Bacteremia</td>
<td>43 (12)</td>
<td>16 (5)</td>
</tr>
</tbody>
</table>

(>10% in any group)
# VALOR - 1° Safety Endpoint: All-Cause Mortality

<table>
<thead>
<tr>
<th></th>
<th>Vosaroxin / Cytarabine N=355</th>
<th>Placebo / Cytarabine N=350</th>
<th>Total (N=705)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>30-Day Mortality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, N</td>
<td>28</td>
<td>23</td>
<td>51</td>
</tr>
<tr>
<td>Primary Cause of death, N (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disease Progression</td>
<td>7 (25)</td>
<td>16 (70)</td>
<td>23 (45)</td>
</tr>
<tr>
<td>Other</td>
<td>21 (75)</td>
<td>7 (30)</td>
<td>28 (55)</td>
</tr>
<tr>
<td><strong>60-Day Mortality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, N</td>
<td>70</td>
<td>68</td>
<td>138</td>
</tr>
<tr>
<td>% [95% CI]</td>
<td>19.7 [15.7, 24.2]</td>
<td>19.4 [15.4, 24.0]</td>
<td>19.6 [16.7, 22.7]</td>
</tr>
<tr>
<td>Primary Cause of death, N (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disease progression</td>
<td>28 (40)</td>
<td>53 (78)</td>
<td>81 (59)</td>
</tr>
<tr>
<td>Other</td>
<td>42 (60)</td>
<td>15 (22)</td>
<td>57 (41)</td>
</tr>
</tbody>
</table>
## VALOR - Efficacy/Safety Summary

<table>
<thead>
<tr>
<th></th>
<th>Vosaroxin / Cytarabine</th>
<th>Placebo / Cytarabine</th>
<th>p-value</th>
<th>HR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median overall Survival (mos)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>7.5</td>
<td>6.1</td>
<td>0.06</td>
<td>0.87</td>
</tr>
<tr>
<td>Stratified Log Rank</td>
<td></td>
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<td>0.02</td>
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<tr>
<td><strong>Response (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>30.1</td>
<td>16.3</td>
<td>&lt;.0001</td>
<td></td>
</tr>
<tr>
<td>CR/ CRp/ CRi</td>
<td>37.1</td>
<td>18.6</td>
<td>&lt;.0001</td>
<td></td>
</tr>
<tr>
<td><strong>All-cause Mortality (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-day</td>
<td>7.9</td>
<td>6.6</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>60-day</td>
<td>19.7</td>
<td>19.4</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>
VALOR - Conclusions

- One of the largest datasets in the R/ R AML

- Improved OS and higher CR rates without increased early mortality for vosaroxin + cytarabine over cytarabine alone

- Clinical benefit may be underestimated, particularly in younger patients, due to the effect of high transplant rates

- These data support the use of this combination as a new standard for salvage therapy in older patients with R/ R AML
Acknowledgements

Austria
Sperr
Universitätsklinik Wien (A959)
Nachbaur
Universitätsklinik Innsbruck
Grat (CEC)
Center for Clinical Cancer and Immunology Trials

Belgium
Havelange (CEC)
Clinique Universitaire St Luc
Deeren
AZ St. Jan Brugge
Selleslag (NCI)
Hospital Erasme Bruxelles
Breems
Hospital Network Antwerp
Mantens
UL Leuven

Czech Republic
Mayer (NCI)
Fakultni nemocnice Hradec Králové
Zak
Fakultni nemocnice Brno

France
Pigneux (NCI)
CHU Bordeaux - Hopital Haut Lévêque
Vey (SC)
Institut Paoli Calmette
Quevauviller
CHU de Nantes - Hôtel Dieu
Rocher
Hôpital Purpan - CHU de Toulouse
Thomas
Hôpital Édouard Herriot
Gardin
Hôpital Avicenne
Hunault
CHU d’Angers
Rousselet
CHU Versailles

Germany
Derigs
Städtische Kliniken Frankfurt am Main-Höchst
Heuser (Krauter)
Medizinische Hochschule Hannover
Krug (NCI)
Universitätskliniken Münster
Horst
II. Medizinische Klinik und Poliklinik im Städtischen Krankenhaus
Frieder
Universitätsklinikum Hamburg-Eppendorf
Oegaprids (Gropper)
St. Jürgens Klinikum
Goetz (Dyster)
Klinikum rechts der Isar der Technischen Universität München

Hungary
Egyed
Kaposi Máté Teaching Hospital
Gaztony
Pécs Andrássy Teaching County Hospital
Udvardy
Debrecen University Medical and Health Science Centre
Borbonyi
Albert Szent-Gyorgy Clinical Center

Italy
Di Renzo
Azienda Ospedaliera “Vito Fazzi”
Castagna
Fondazione IRCCS Policlinico S. Matteo
Galdino
Azienda Ospedaliero-Universitaria Maggiori Delle Carità
Rimini
UCSC di Ematologia con TMO, AORN Antonio Cardarelli
Carena
A.O.U. San Martino
Cuneo
Azienda Ospedaliero-Universitaria Sant’Anna

Poland
Mazur
Samodzielny Publiczny Szpital Kliniczny Nr 1
Heltman (NCI)
Uniwersyteckie Centrum Kliniczne

Spain
Tomas
Centro Oncológico MD Anderson International España

United Kingdom
Kell (NCI)
University Hospital of Wales
Ali
Hull Hospital
Hunter
Leicester Royal Infirmary, University Hospitals of Leicester NHS Trust
Cahalin
Blackpool, Fylde and Wyre Hospitals NHS Trust
Craig
Addenbrooke’s Hospital
Clark
Royal Liverpool University Hospital
Thouless (Yin)
Manchester Royal Infirmary

Australia
DiRaganzo
The Canberra Hospital
Lewis
Royal Adelaide Hospital
Szer
Royal Melbourne Hospital
Curnow
Concord General Rehearsation Hospital
Ross
Flinders Medical Centre
Weil
The Alfred Hospital
Hartberg
Westmead Hospital
Cannell
Royal Perth Hospital
Durrant
Royal Brisbane and Women’s Hospital
Campbell
Andrew Love Cancer Centre, Geelong Hospital

New Zealand
Gibbons
Christchurch Hospital
Corbett (Lead)
Waikato Hospital
Berkshin
Auckland City Hospital

South Korea
Je-Hwan Lee
Asian Medical Center
Jun Ho Jiang
Samsung Medical Center
In-Ho Kim
Seoul National University Hospital
Hee-Je Kim
Seoul St Mary Hospital

Canada
Dozan
Saint John Regional Hospital
Desjardins
Hospital Charles LeMoyne
Kaw
Queen Elizabeth II Health Sciences Center
Hogges
Diamond Health Centre, Department of Hematology
Schult (Branden)
Princess Margaret Hospital, University Health Network

United States
Bady
University of Michigan
Balani
Sharp Memorial Hospital
Carter (Jamieson)
University of Iowa Roy J. and Lucille A. Carver College of Medicine
Cooper
Ireland Cancer Center, University Hospitals Case Medical Center
Craig
West Virginia University
Dameron
UCSF Helen Diller Family Comprehensive Cancer Center
Drew
Barnes Cancer Center
Gautier
Dartmouth Hitchcock Medical Center
Goldberg
Hackensack University Medical Center
Greene
Family Cancer Center, PLLC
Kallitz
North Shore-LIJ Health System, Montefiore Cancer Center
Kurikose
Henry Ford Health System
Larbout
Moffitt Cancer Center University of South Florida
Lyons
Cancer Care Centers of South Texas - Medical Center - San Antonio
Maris
Rocky Mountain Blood and Marrow Transplant Program
Miller
Carolinas Medical Center
Odenike
University of Chicago Medical Center
Powell
Wake Forest University Baptist Medical Center - Comprehensive Cancer Center
Reandin
MD Anderson Cancer Center Department of Urology
Ritchie
New York Presbyterian Hospital-Weill Cornell Medical College
Kirikiri
Memorial Sloan Kettering Cancer Center
Rubenstein
St. Francis Hospital & Health Center
Savona
Sarah Cannon Research Institute
Sayer
Indiana University Simon Cancer Center
Schieller
David Geffen School of Medicine at UCLA
Schuster
Stony Brook University Medical Center
Selker
New York Medical College
Strickland
Vanderbilt-Ingram Cancer Center
Stuart
Medical University of South Carolina
Venugopal
Rush University Medical Center
Vusirikala
UT Southwestern University Hospital