

S149

**MRD-GUIDED OR FIXED 12 CYCLES OF VENETOCLAX CONSOLIDATION AFTER VENETOCLAX PLUS OBINUTUZUMAB TREATMENT IN FIRST-LINE FCR UNFIT PATIENTS WITH CLL: PRIMARY ENDPOINT ANALYSIS OF THE HOVON 139/GIVE TRIAL**

Topic: 06. Chronic lymphocytic leukemia and related disorders - Clinical

Keywords: Chronic lymphocytic leukemia Consolidation Minimal residual disease (MRD) Targeted therapy

Mark-David Levin<sup>1</sup>, Julie Dubois<sup>2</sup>, Kazem Nasserinejad<sup>3</sup>, Johan Dobber<sup>4</sup>, Clemens Mellink<sup>5</sup>, Anne-Marie Kevie van der Kersemaekers<sup>6</sup>, Ludo Evers<sup>4</sup>, Francien Boer de<sup>7</sup>, Harry Koene<sup>8</sup>, John Schreurs<sup>9</sup>, Marjolein Klift van der<sup>10</sup>, Gerjo Velders<sup>11</sup>, Ellen Spek van der<sup>12</sup>, Hanneke Straaten van der<sup>13</sup>, Mels Hoogendoorn<sup>14</sup>, Michel Gelder van<sup>15</sup>, Ward Posthuma<sup>16</sup>, Hein Visser<sup>17</sup>, Ilse Houtenbos<sup>18</sup>, Cecile Idink<sup>19</sup>, Djamila Issa<sup>20</sup>, Ellen Dompeling<sup>21</sup>, Henk Zaanen van<sup>22</sup>, Hendrik Veelken<sup>23</sup>, Henriette Levenga<sup>24</sup>, Lidwien Tick<sup>25</sup>, W Terpstra<sup>26</sup>, Sanne Tonino<sup>27</sup>, Mehrdad Mobasher<sup>28</sup>, Arnon Kater<sup>27</sup>, Sabina Kersting<sup>29</sup>

<sup>1</sup> Internal Medicine, ASZ, Dordrecht, Netherlands

<sup>2</sup> Hematology, AmsterdamUMC, Amsterdam, Netherlands

<sup>3</sup> Hematology – HOVON Data Center, Erasmus MC Cancer Institute, Rotterdam, Netherlands

<sup>4</sup> Laboratory special hematology, AmsterdamUMC, Amsterdam, Netherlands

<sup>5</sup> Laboratory of cytogenetics, AmsterdamUMC, Amsterdam, Netherlands

<sup>6</sup> Laboratory cytogenetics, Amsterdam UMC, Amsterdam, Netherlands

<sup>7</sup> Internal Medicine, Ikazia hospital, Rotterdam, Netherlands

<sup>8</sup> Hematology, Antonius hospital, Nieuwegein, Netherlands

<sup>9</sup> Internal Medicine, Martini hospital, Groningen, Netherlands

<sup>10</sup> Internal Medicine, Amphia hospital, Breda, Netherlands

<sup>11</sup> Internal Medicine, Gelderland valley hospital, Ede, Netherlands

<sup>12</sup> Internal Medicine, Rijnstate hospital, Arnhem, Netherlands

<sup>13</sup> Internal Medicine, St. Jansdal hospital, Harderwijk, Netherlands

<sup>14</sup> Internal Medicine, Medical Center Leeuwarden, Leeuwarden, Netherlands

<sup>15</sup> Hematology, MUMC, Maastricht, Netherlands

<sup>16</sup> Internal Medicine, RDGG, Delft, Netherlands

<sup>17</sup> Internal Medicine, Nothwest Clinics, Alkmaar, Netherlands

<sup>18</sup> Internal Medicine, Spaarne Gasthuis, Hoofddorp, Netherlands

<sup>19</sup> Internal Medicine, ZorgSaam Hospital, Terneuzen, Netherlands

<sup>20</sup> Internal Medicine, Jeroen Bosch hospital, 's Hertogenbosch, Netherlands

<sup>21</sup> hematology, Isala hospital, Zwolle, Netherlands

<sup>22</sup> Internal Medicine, St. Franciscus hospital, Rotterdam, Netherlands

<sup>23</sup> Hematology, LUMC, Leiden, Netherlands

<sup>24</sup> Internal Medicine, Groene hart hospital, Gouda, Netherlands

<sup>25</sup> Internal Medicine, Maxima MC, Eindhoven, Netherlands

<sup>26</sup> Internal Medicine, OLVG, Amsterdam, Netherlands

<sup>27</sup> Hematology, Amsterdam UMC, Amsterdam, Netherlands

<sup>28</sup> Corvus Pharmaceuticals, Burlingame, United States

<sup>29</sup> Hematology, HAGA teaching hospital, the Hague, Netherlands

**Background:**

Fixed duration treatment of chronic lymphocytic leukemia (CLL) patients with venetoclax (V) combined with anti-CD20 antibody both in 1<sup>st</sup>-line (12 cycles) and relapsed / refractory (RR) (24 cycles) results in high rates of undetectable minimal residual disease (uMRD) and prolonged PFS. The benefit of consolidation treatment in 1<sup>st</sup>-line patients after Obinutuzumab (O)-V is currently unknown.

**Aims:** Primary endpoint analysis of a phase 2 randomized trial in 1<sup>st</sup>-line FCR unfit CLL patients treated with standard O-V, randomized to standard or MRD-based addition of V for 12 cycles.

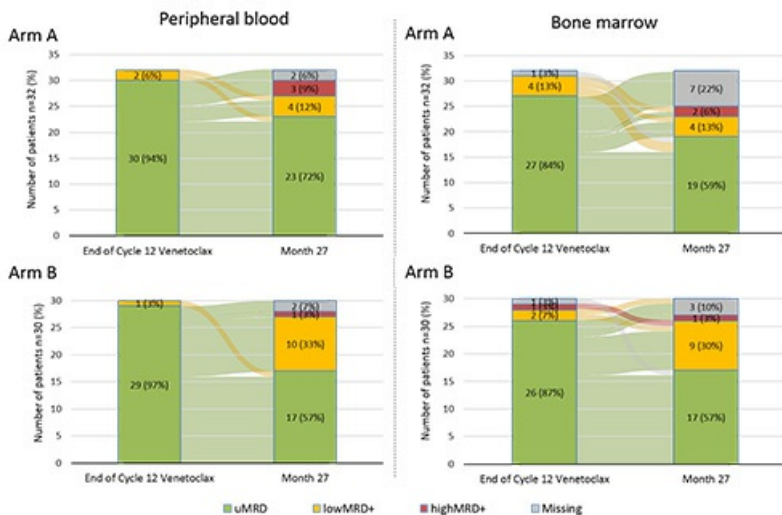
**Methods:**

FCR-unfit treatment naïve CLL patients with treatment indication according to IWCLL were eligible. Treatment consisted of 4 treatment phases: two cycles of O; 6 cycles of O+V (IND-1); 6 cycles V (IND-2); and a 1:1 randomization phase: maintenance with 12 cycles of V irrespective of MRD (arm A) or MRD guided V maintenance (treatment limited to patients with no uMRD after IND-2 with 12 cycles of V, arm B). MRD was centrally assessed by flow cytometry in bone marrow (BM) after 12 and 24 cycles and in blood (PB) at screening, cycle 6 and 12 and every 3 months thereafter until month 27. Complex genotype (CG), ≥ 3 CNV, was assessed by CGH-array. The primary endpoint was uMRD (<1:10.000 leukocytes by flowcytometry) in BM and no progression after a maximum of 24 cycles of V.

**Results:**

In total, 70 patients were enrolled, of whom 3 were post-hoc excluded because of not fulfilling the diagnosis of CLL. Baseline characteristics were 70% male, median age 71 years (range 57-89 years), 49% unmutated IgVH, 13% del 17p/TP53 and 22% CG. The primary endpoint was reached in 53% and 57% of patients in arm A and arm B, respectively, therefore both arms reached the pre-set requirements. In PB, uMRD and no progression was established in 59% and 57% of patients, respectively. After 2 cycles of O ORR was 43% which improved to 94% (31% CR) after IND-2 (no PD). At the primary endpoint ORR was 88% (16 CR, 3 PD) in arm A versus 97% (19 CR, 1 PD) in arm B. Grade 2, 3, 4 and 5 AE were established 14, 35, 17, 1 times before randomization; 14, 6, 2, 0 times in arm A and 7, 4, 0, 0 in arm B, mainly hematological and infections. Two cycles of O reduced the TLS risk from 28 and 60% to 1 and 15% (high and medium TLS risk, respectively). O was stopped in 4 patients during IND-1 because of mainly hematologic toxicity and 4 patients stopped V, while 22 patients received G-CSF and 17 patients rasburicase. During IND-2 1 patient stopped V, while 14 patients received G-CSF. Five patients were not randomized due to death (1), refusal to continue (1) and excessive toxicity (3). Finally 62 patients underwent randomization, 32 to fixed V and 30 to MRD-guided V treatment (of whom only 2 patients received V due to no uMRD). uMRD in BM was found in 79% after IND-2; and at primary endpoint in arm A 59% and 57% in arm B. uMRD in PB was found in 88% after IND-2, and at primary endpoint 72% and 57% in arm A and arm B, respectively (Figure 1). Estimated overall survival at 48 months was 94%. MRD positive disease was not found more frequently in patients with high-risk baseline characteristics (unmutated IGVH, del17p/TP53mut, CG).

**Image:**



**Summary/Conclusion:** In this phase 2 study we confirm that treatment with O-V is well tolerated in FCR-unfit patients and both fixed duration V and MRD-guided V consolidation resulted in > 50% of patients with uMRD and without progression after a maximum of 24 cycles of V, which warrants further study of MRD-guided or fixed consolidation treatment after O-V induction.

**Abstract Book Citations:** Authors, Title, HemaSphere, 2021;5;(S2):pages. Abstract Book, DOI:  
<http://dx.doi.org/10.1097/HS9.0000000000000566>

**Disclaimer:** Articles published in the journal HemaSphere exclusively reflect the opinions of the authors. The authors are responsible for all content in their abstracts including accuracy of the facts, statements, citing resources, etc.

**EHA2021 Virtual**  
**JUNE 9-17 2021**  
**POWERED BY M-ANAGE.COM**

