

# Real-World First-Line Fixed-Duration Ibrutinib+Venetoclax Treatment in Patients With Chronic Lymphocytic Leukemia: Analysis From the Prospective REALITY-Worldwide Study

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## Key Takeaway

REALITY-WW demonstrates the effectiveness and tolerability of FD Ibr+Ven in routine clinical practice, including in elderly patients and those with high-risk features

## Conclusions

ORR was high throughout treatment, reaching 94.5% by the end of 15 treatment cycles

FD Ibr+Ven is well tolerated in a diverse RW population, with low rates of neutropenia (14.8%), and no increase in TLS risk after the Ibr lead-in period. The low rates of atrial fibrillation (3.8%) were comparable to those reported with other BTKis, supporting this as a BTKi class effect

Low rates of Ibr discontinuation due to TEAEs (2.9%) show the robustness of FD Ibr+Ven in an RW setting



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## Introduction

- Fixed-duration (FD) ibrutinib + venetoclax (Ibr+Ven) has demonstrated noninferiority to continuous Ibr, with similar 3-year progression-free survival (PFS) and overall survival (OS) rates in patients with previously untreated chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL)<sup>1</sup>
- FD Ibr+Ven also achieves OS rates comparable with an age-matched general European population<sup>2</sup>
- FD Ibr+Ven is approved in 78 countries<sup>3</sup> and real-world (RW) data have been reported on its use
- Pooled analysis from the REALITY-worldwide (WW) and REALITY-2 studies indicated that FD Ibr+Ven has a manageable safety profile and is effective in clinical practice<sup>4</sup>
- The Spanish LI+VE RW study reported a tolerable safety profile, low rates of discontinuations, and 6-month OS/PFS rates of 100%/98.9%<sup>5</sup>
- In the Thrive study, rates of discontinuations were favorable when compared with historical trials, including in patients aged ≥ 65 years without del17p<sup>6</sup>
- Here we present analysis from the REALITY-WW RW prospective study, with a median time on study of 9.6 months

## Results

### Patients

- As of March 2026, all patients are now fully enrolled. 175 patients are still on study treatment, and 16 patients have completed study treatment
- 18 patients discontinued study treatment prematurely
- The median age was 66 years, with 54.1% of patients aged ≥ 65 years and 19.1% ≥ 75 years
- Median time on study was 9.6 months

Table 1: Patient baseline characteristics

Characteristic	Treated patients (N = 209)
<b>Median age (range), years</b>	66.0 (39-87)
<b>Patients aged ≥ 65 years, n (%)</b>	113 (54.1)
<b>Patients aged ≥ 75 years, n (%)</b>	40 (19.1)
<b>Sex, n (%)</b>	
Male	137 (65.6)
Female	72 (34.4)
<b>Initial diagnosis, n (%)</b>	
CLL	200 (95.7)
SLL	9 (4.3)
<b>CIRS score, n (%)<sup>a</sup></b>	
> 6	23 (12.0)
<b>ECOG PS, n (%)<sup>b</sup></b>	
0-1	172 (97.2)
2	5 (2.8)
<b>IGHV status, n (%)<sup>c</sup></b>	
Unmutated	87 (42.9)
Mutated	57 (28.1)
Not available	55 (27.1)
Not assigned to a group	4 (2.0)
<b>TP53, n (%)<sup>d</sup></b>	
Mutation present	6 (3.0)
No mutation present	167 (82.7)
Not available	29 (14.4)
<b>Del17p, n (%)<sup>e</sup></b>	
Mutation present	25 (12.3)
No mutation present	130 (64.0)
Not available	48 (23.6)

<sup>a</sup>191 assessed. <sup>b</sup>177 assessed. <sup>c</sup>203 assessed. <sup>d</sup>202 assessed. CIRS, Cumulative Illness Rating Scale; ECOG PS, Eastern Cooperative Oncology Group performance status.

### References

- Al-Sawaf O, et al. *N Engl J Med*. 2026;394:1084-1096. 2. Ghia P, et al. *Hemasphere*. 2025;9:e70246. 3. Munir T, et al. *Future Oncol*. 2025;21:3763-3771. 4. Thieblemont C, et al. *Blood*. 2025;146:3903. 5. Hernández Rivas JA, et al. Presented at ASH 2025, December 6-9, 2025, Orlando, FL, USA. Poster 2728. 6. Visentin A, et al. *Blood*. 2025;146:6285.

## Methods

- Patients aged ≥ 18 years with first-line CLL/SLL requiring treatment were enrolled over 63 sites in Brazil, France, Israel, Italy, and the United Kingdom
- Decision to start treatment with FD Ibr+Ven was taken prior to, and independent of, the patient's enrollment in the study
- Patients received a 3-cycle lead-in of Ibr (420 mg once daily), followed by 12 cycles of FD Ibr+Ven (with Ven dose ramp-up from 20 to 400 mg over 5 weeks) (Figure 1)
- Data were collected every ~ 12 weeks during routine clinic follow-up visits until subsequent treatment or study completion
- The primary end point was best overall response rate (ORR) by the end of 15 treatment cycles; ORR included complete response (CR), CR with incomplete hematological recovery (CRI), partial response (PR), and PR with lymphocytosis (PR-L)
- Secondary end points included PFS, OS, and safety

Figure 1: Study design for REALITY-WW

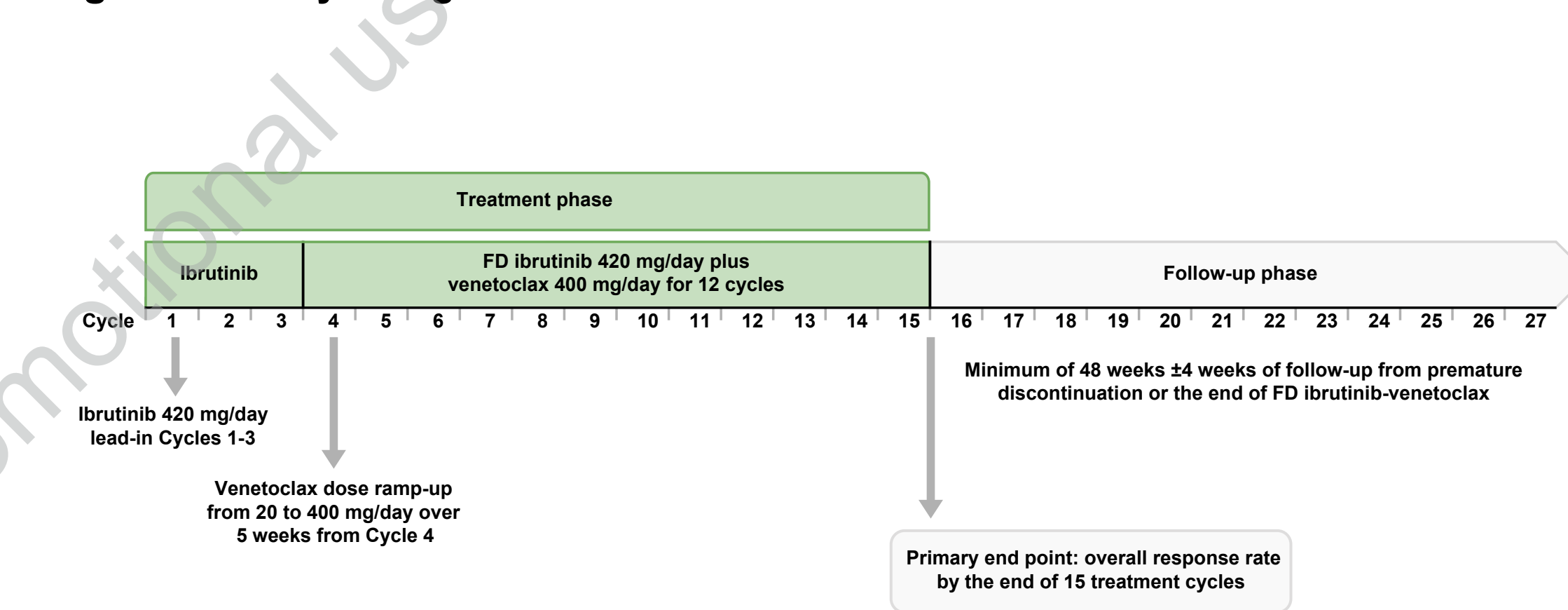
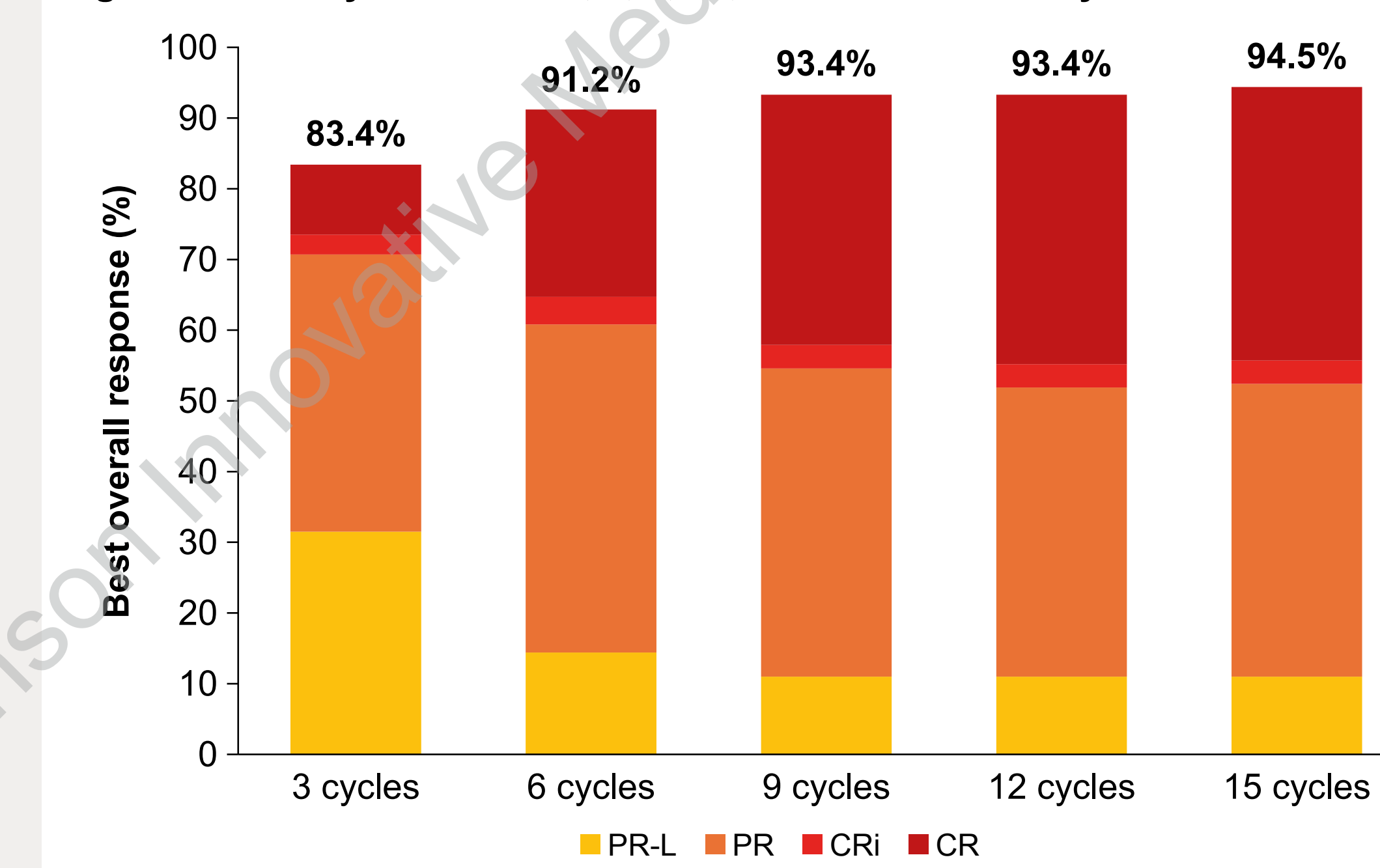


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### Overall response rate in FD Ibr+Ven–treated patients with at least 1 postbaseline assessment

Figure 2: ORR by the end of 3, 6, 9, 12, and 15 treatment cycles



At 3 cycles = 8.3% with stable disease (SD), 1.1% with progressive disease (PD), and 7.2% not evaluable (NE). At 6 cycles = 4.4% SD, 1.1% PD, and 3.3% NE. At 9 cycles = 3.3% SD, 1.1% PD, and 2.2% NE. At 12 cycles = 3.3% SD, 1.1% PD, and 2.2% NE. At 15 cycles = 2.8% SD, 1.1% PD, and 1.7% NE.

Figure 3: ORR by the end of 15 cycles by subgroup

	ORR and 95% CI	n/N (%)	95% CI
<b>Age</b>			
< 65 years	80/86 (93.0)		87.64-98.41
≥ 65 years	91/95 (95.8)		91.75-99.83
< 75 years	139/149 (93.3)		89.27-97.31
≥ 75 years	32/32 (100.0)		100.00-100.00
<b>Sex</b>			
Male	114/121 (94.2)		90.06-98.37
Female	57/60 (95.0)		89.49-100.00
<b>ECOG PS</b>			
0	71/76 (93.4)		87.85-98.99
≥ 1	76/79 (96.2)		91.99-100.00
<b>CIRS</b>			
≤ 6	139/145 (95.9)		92.62-99.10
> 6	20/21 (95.2)		86.13-100.00
<b>IGHV status</b>			
Unmutated	74/77 (96.1)		91.78-100.00
Mutated	43/49 (87.8)		78.58-96.93
<b>Del17p or known TP53 status</b>			
No	100/103 (97.1)		93.84-100.00
Yes	24/27 (88.9)		77.03-100.00

CI, confidence interval. Analysis set includes patients with at least 1 postbaseline assessment; CIs are based on normal approximation (Wald's CI).

- Among the 181 treated patients who had ≥ 1 postbaseline disease assessments, ORR was 94.5% (95% CI, 91.2-97.8) by the end of 15 treatment cycles, including a CR in 38.7%, CRI in 3.3%, PR in 41.4%, and PR-L in 11.0% (Figure 2). Additionally, 5 patients had stable disease, 2 had progressive disease, and 3 were not evaluable
- When evaluating all response assessments available by the end of each treatment cycle, ORR was 83.4% by the end of 3 treatment cycles, 93.4% by the end of 9 treatment cycles, and 94.5% by the end of 15 treatment cycles
- ORR was generally consistent across patient subgroups (Figure 3)

### Safety in FD Ibr+Ven–treated patients

- Overall median duration of exposure was 9.1 months, with 8.6 months (range: 0.1-17.3) and 6.3 months (range: 0.0-14.1) for Ibr and Ven, respectively
- Any-grade treatment-emergent adverse events (TEAEs) were reported in 148 (70.8%) patients, the most common of which were infections (20.6%) and diarrhea (18.7%) (Table 2)
- Severe TEAEs were reported in 36 (17.2%) patients and serious TEAEs in 31 (14.8%)
- 8 (3.8%) patients had reported atrial fibrillation, 2 (1.0%) of which were severe; 4 of these patients had either an interruption or reduction of Ibr dose. Of these 8 patients, 2 had a history of cardiac disease and 4 had a history of hypertension
- 6 (2.9%) patients had TEAEs leading to discontinuation of Ibr, 23 (11.0%) leading to modification of Ibr dose, and 50 (23.9%) leading to interruption of Ibr dose
- No cases of clinical/laboratory tumor lysis syndrome (TLS) were reported
- Of the 57 patients who were classified as having high TLS risk at baseline, 26 had a reduction to intermediate or low risk, and no patients had an increase in TLS risk between baseline and Cycle 4
- 2 patients aged ≥ 75 years discontinued Ibr due to TEAEs

Table 2: TEAEs occurring in ≥ 5% of patients

Treatment-emergent adverse event	Any grade, n (%)	Severe, n (%)
<b>Infections and infestations<sup>a</sup></b>	43 (20.6)	8 (3.8)
<b>Diarrhea</b>	39 (18.7)	0
<b>Neutropenia</b>	31 (14.8)	12 (5.7)
<b>Muscle spasms</b>	19 (9.1)	0
<b>Arthralgia</b>	19 (9.1)	0
<b>Nausea</b>	17 (8.1)	0
<b>Fatigue</b>	15 (7.2)	0
<b>Contusion</b>	13 (6.2)	0
<b>Thrombocytopenia</b>	12 (5.7)	3 (1.4)
<b>Hypertension</b>	11 (5.3)	1 (0.5)

<sup>a</sup>System organ class.

