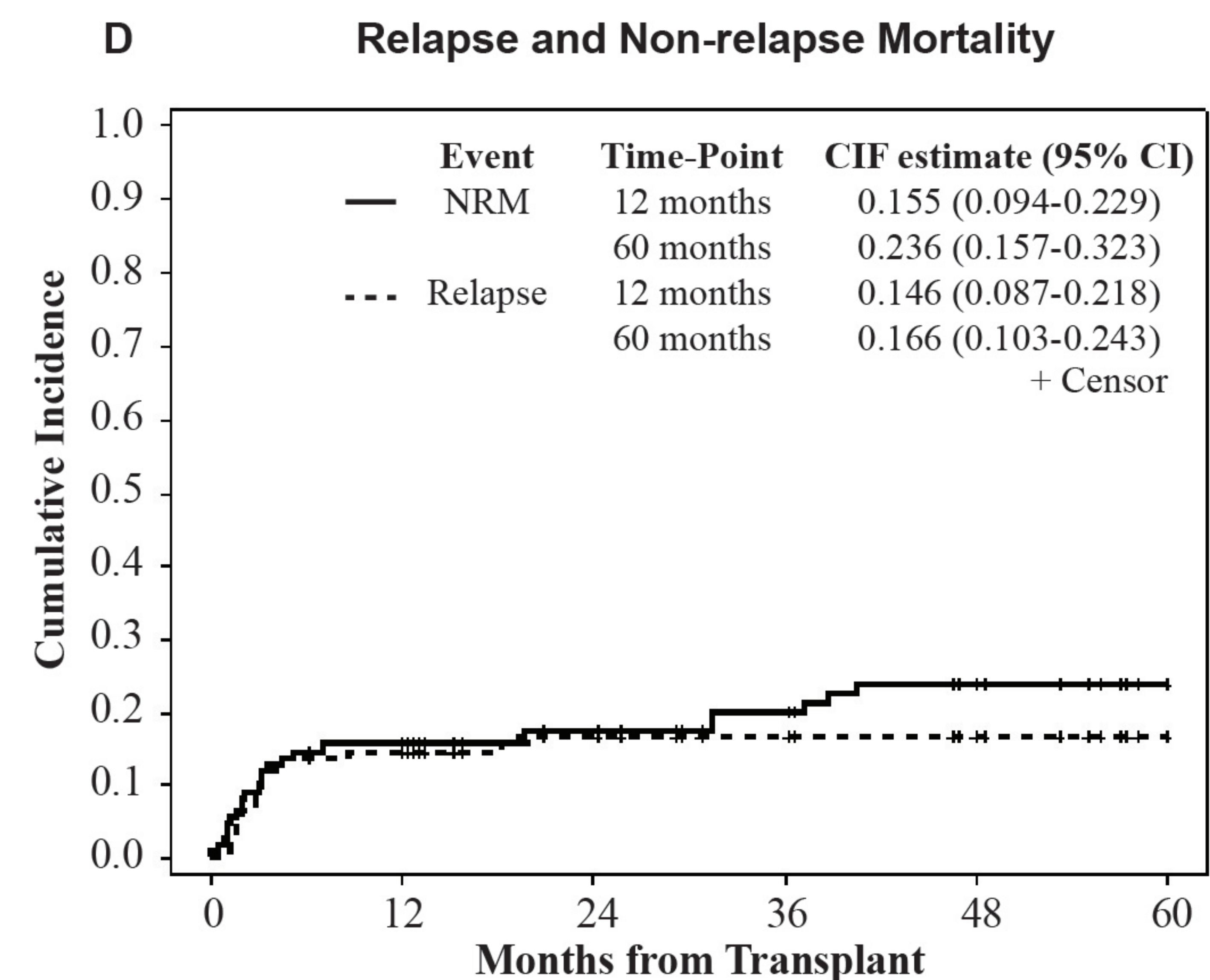
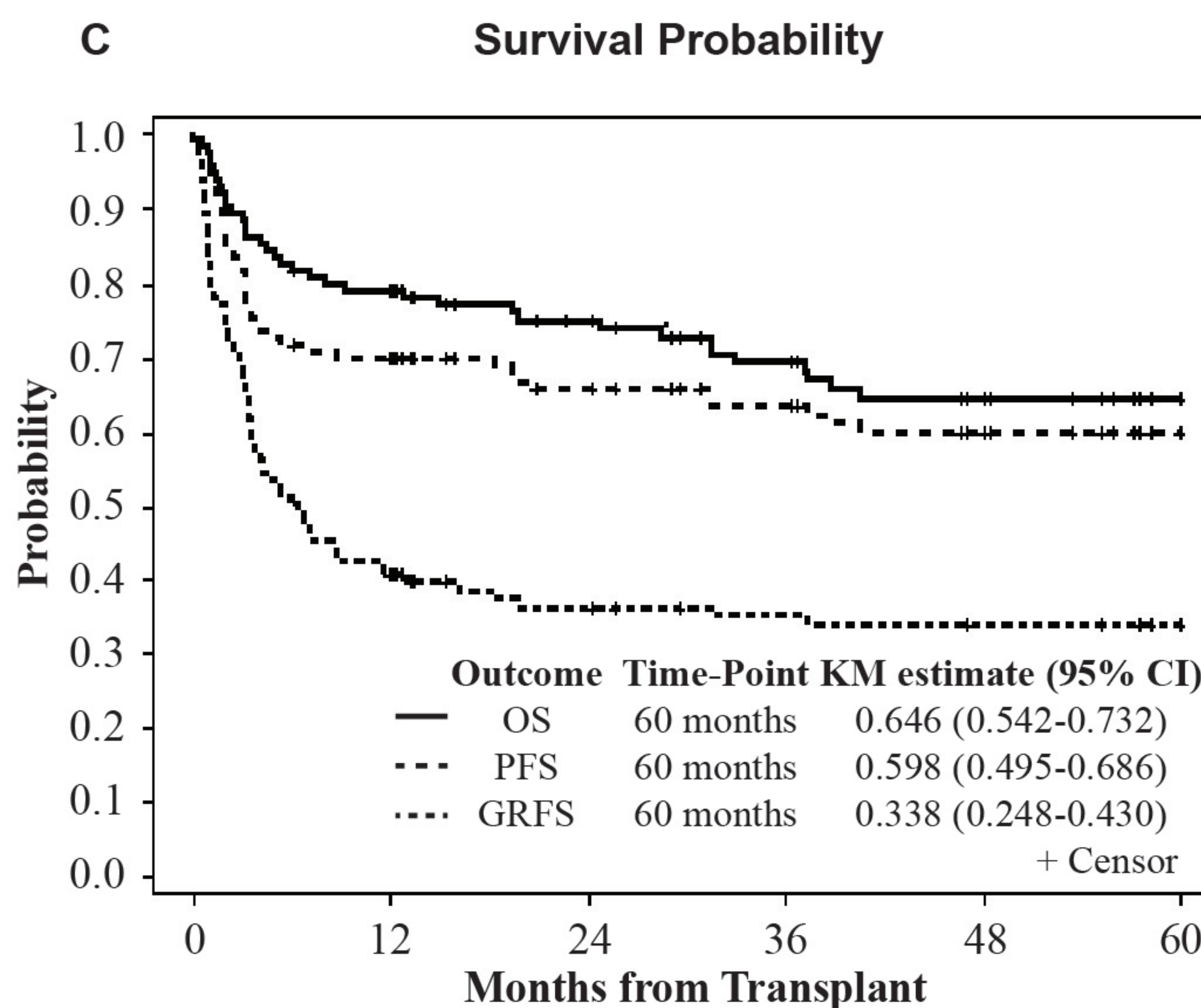
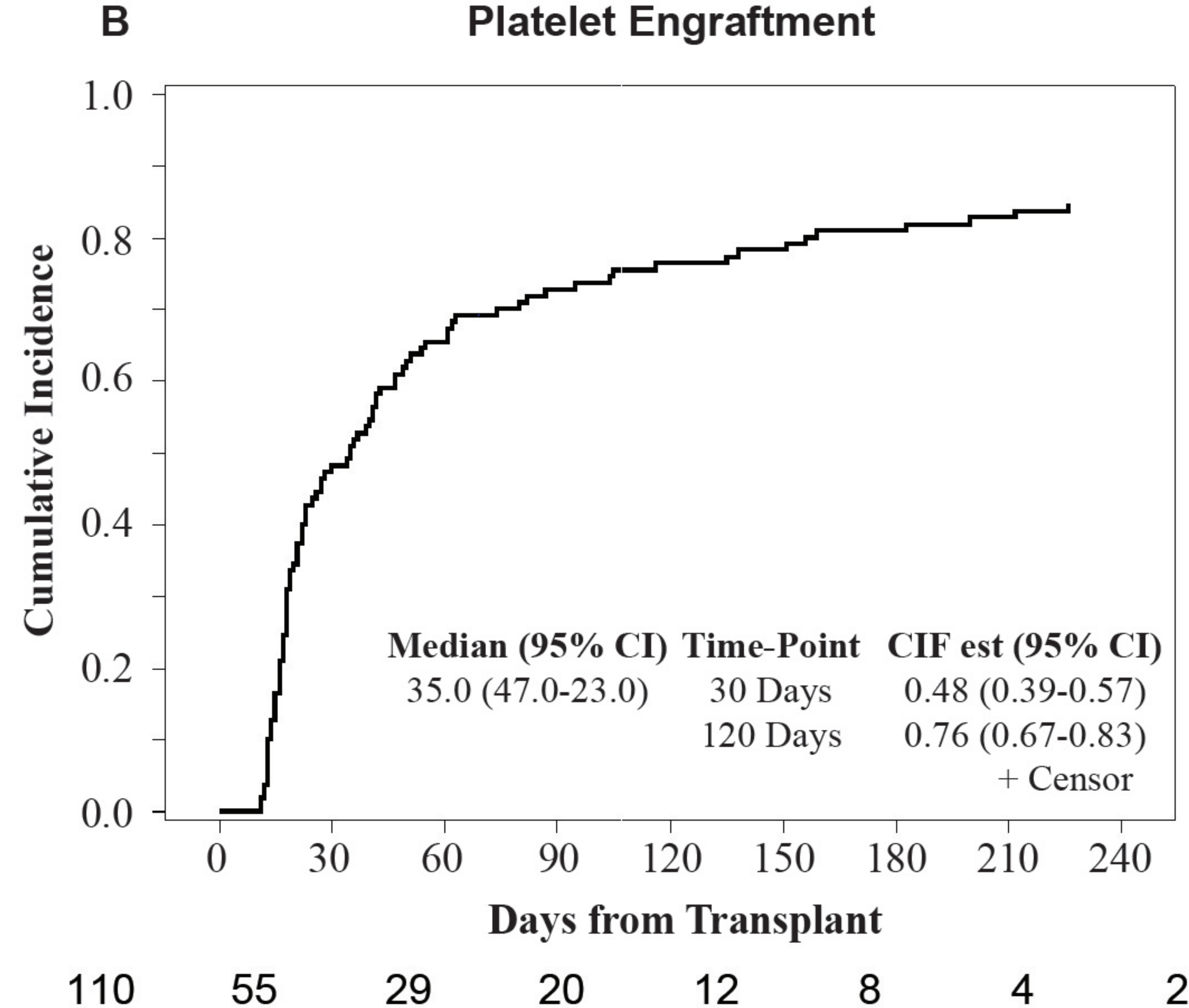
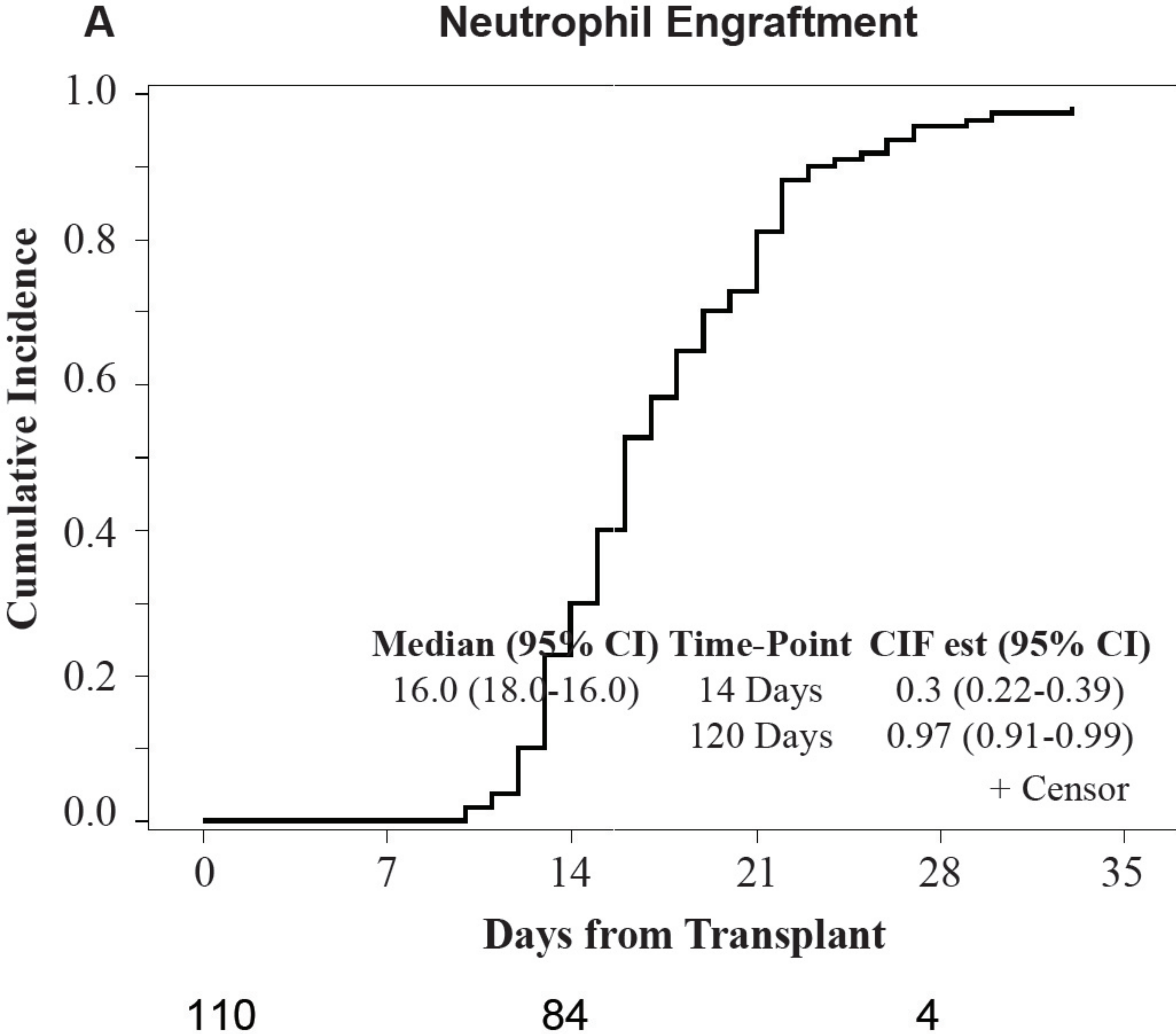


**Supplement table 1- List of sequenced genes**

<i>ASXL1</i>	<i>CBLB</i>	<i>DNMT3A</i>	<i>IDH1</i>	<i>KMT2A</i>	<i>NOTCH1</i>	<i>PTPN11</i>	<i>TET2</i>
<i>ATM</i>	<i>CCND1</i>	<i>EP300</i>	<i>IDH2</i>	<i>KMT2C</i>	<i>NOTCH2</i>	<i>RUNX1</i>	<i>TNFAIP3</i>
<i>BCOR</i>	<i>CCND3</i>	<i>ETV6</i>	<i>IKZF1</i>	<i>KMT2D</i>	<i>NPM1</i>	<i>SETBP1</i>	<i>TP53</i>
<i>BIRC3</i>	<i>CD79A</i>	<i>EZH2</i>	<i>IL7R</i>	<i>KRAS</i>	<i>NRAS</i>	<i>SF3B1</i>	<i>U2AF1</i>
<i>BRAF</i>	<i>CD79B</i>	<i>FBXW7</i>	<i>JAK1</i>	<i>MEF2B</i>	<i>PAX5</i>	<i>SPI1</i>	<i>UBR5</i>
<i>BTK</i>	<i>CDKN2A</i>	<i>GATA1</i>	<i>JAK2</i>	<i>MIR142</i>	<i>PDGFRA</i>	<i>SRSF2</i>	<i>WHSC1</i>
<i>CALR</i>	<i>CEBPA</i>	<i>GATA2</i>	<i>JAK3</i>	<i>MPL</i>	<i>PHF6</i>	<i>STAG2</i>	<i>WHSC1L1</i>
<i>CARD11</i>	<i>CREBBP</i>	<i>HRAS</i>	<i>KDM6A</i>	<i>MYC</i>	<i>PIK3CA</i>	<i>SUZ12</i>	<i>WT1</i>
<i>CBL</i>	<i>CSF3R</i>	<i>ID3</i>	<i>KIT</i>	<i>MYD88</i>	<i>PTEN</i>	<i>TCF3</i>	<i>ZRSR2</i>

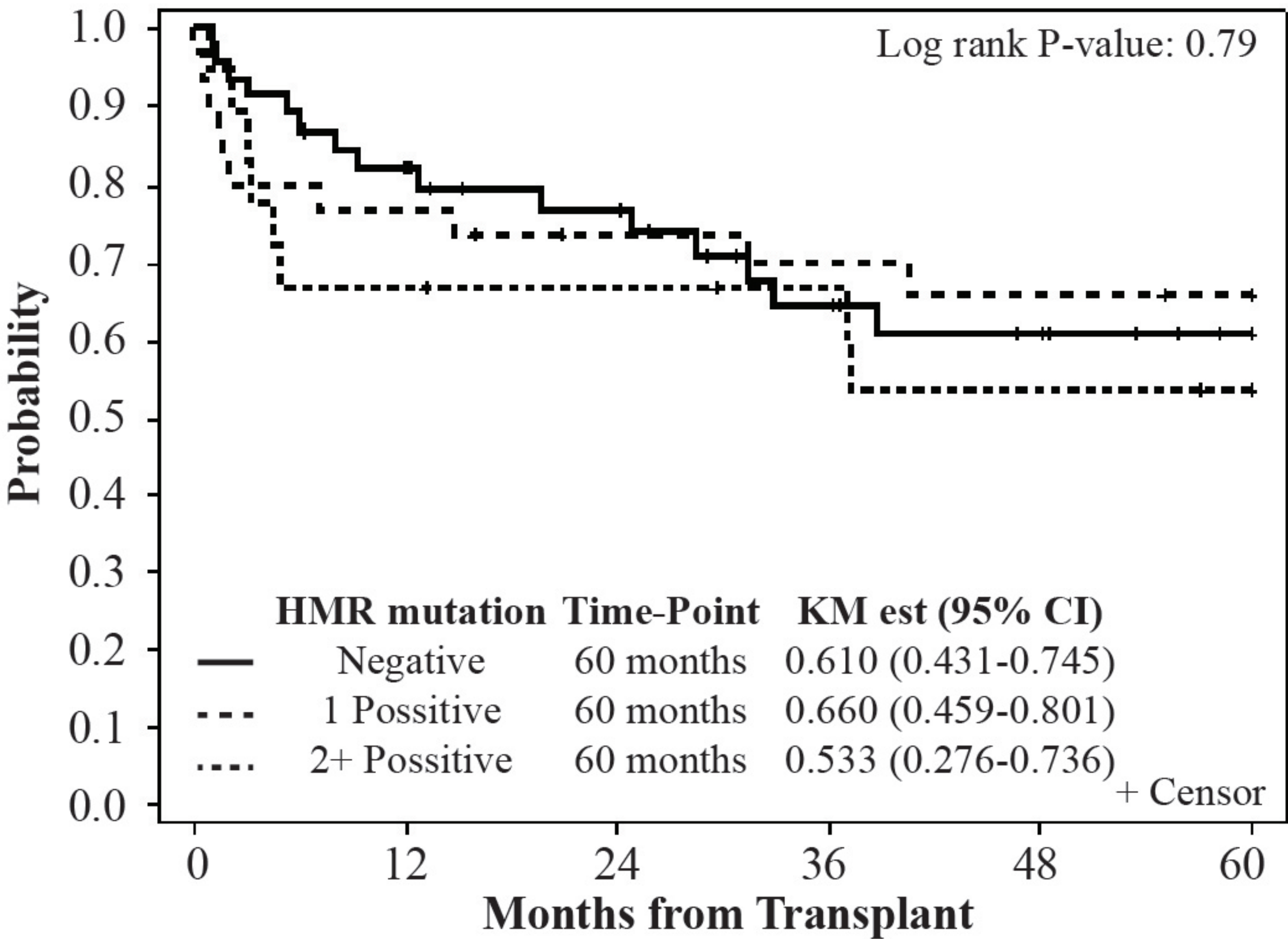


OS	110	85	71	60	52	44
PFS	110	75	62	54	47	39
GRFS	110	43	32	28	26	23

NRM	110	75	62	54	47	39
Relapse	110	75	62	54	47	39

**Supplementary Figure 1.** AlloHCT outcomes (A) Neutrophil engraftment at 14 and 120 days post alloHCT, (B) Platelet engraftment at 30 and 120 days post allo-HCT, (C) Overall survival, progression-free survival, and GVHD-free relapse-free survival at 60 months post allo-HCT, and (D) Relapse and none-relapse mortality at 12 and 60 months post alloHCT.

# Survival Outcome Post AlloHCT

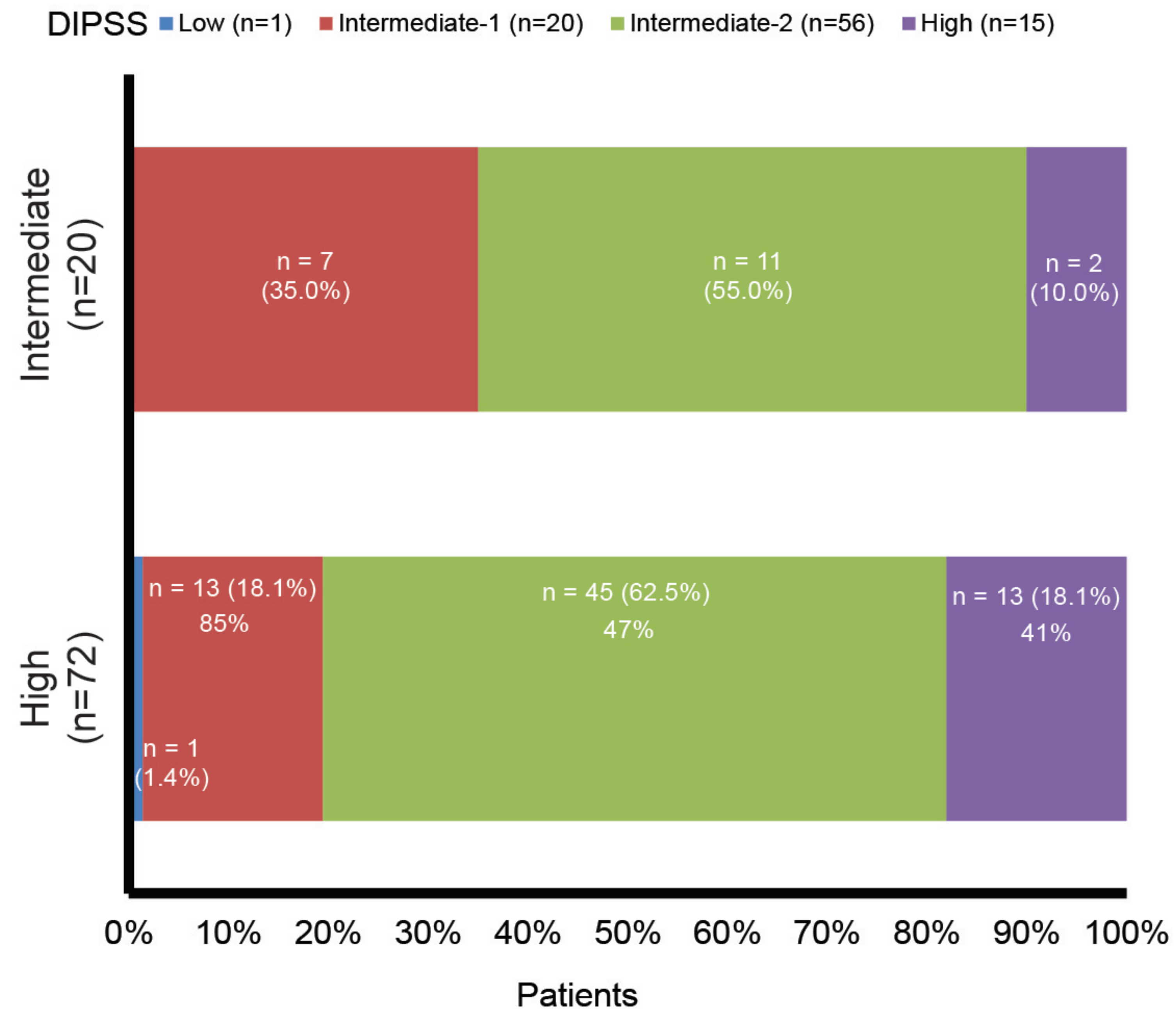


Negative	45	35	28	20	16	11
1 Positive	30	23	20	19	18	17
2+ Positive	18	12	11	10	8	7

**Supplementary Figure 2.** Survival outcome at 60 months post alloHCT based on the HMR status (negative, 1 or 2+ positive).

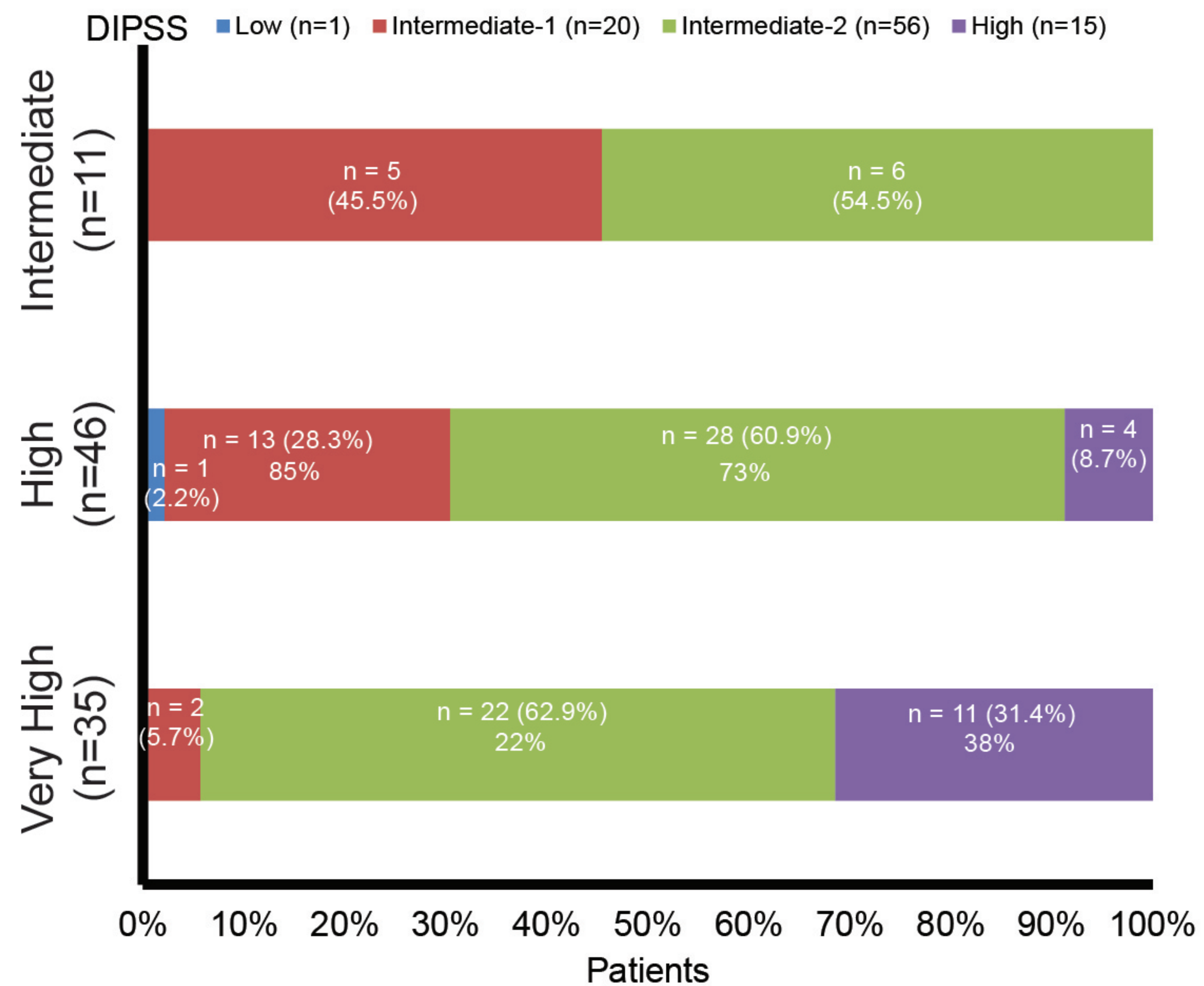
A

MIPSS70



B

MIPSS70+ V2.0



**Supplementary Figure 3.** Comparison of patients' distribution by DIPSS category with (A) MIPSS70 and (B) MIPSS70+ V2.0