

Supplementary Table S2. Patient-level data regarding the type of 30-day adverse postoperative outcomes.

Patient number	Hemoglobin category	Surgery risk; type of procedure	Adverse postoperative outcome
784	Normal	Intermediate/major; hemicolectomy	Death
797	Anemia	Intermediate/major; short bowel resection	Death
217	Anemia	Intermediate/major; hernia repair	Ischemic stroke
222	Normal	Intermediate/major; sigmoid colon resection	Deep vein thrombosis and pulmonary embolism
418	Normal	Low; meniscetomy	Pulmonary embolism
931	Normal	Intermediate/major; miomectomy	Ischemic stroke
53	Anemia	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
165	Polycythemia	Intermediate/major; hip replacement	Local hematoma and drop in hemoglobin level $\geq 20\text{g/L}$
220	Anemia	Intermediate/major; hernia repair	Rectal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusions
256	Normal	Intermediate/major; subtotal colectomy	Intraabdominal bleeding and drop in hemoglobin level $\geq 20\text{g/L}$
289	Normal	Intermediate/major; colon cancer resection	Intraabdominal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
310	Normal	Intermediate/major; colon cancer resection	Intraabdominal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
358	Polycythemia	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq 20\text{g/L}$
360	Normal	Intermediate/major; gastrectomy	Intraabdominal hematoma, drop in hemoglobin level $\geq 20\text{g/L}$
364	Normal	Intermediate/major; hip replacement	Local hematoma, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
367	Normal	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
438	Normal	Intermediate/major; colon cancer resection - hemicolectomy	Intraabdominal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion

446	Normal	Low; transurethral prostate resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
477	Normal	Intermediate/major; hernia repair	Drop in hemoglobin level $\geq 20\text{g/L}$
487	Normal	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
506	Normal	Low; partial mastectomy	Local hematoma, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
537	Normal	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq 20\text{g/L}$
543	Normal	Low; partial mastectomy	Drop in hemoglobin level $\geq 20\text{g/L}$
563	Normal	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq 20\text{g/L}$
574	Normal	Intermediate/major; colon cancer resection - hemicolectomy	Drop in hemoglobin level $\geq 20\text{g/L}$
585	Anemia	Intermediate/major; intraabdominal adhesiolysis	Drop in hemoglobin level $\geq 20\text{g/L}$
592	Anemia	Intermediate/major; knee replacement	Drop in hemoglobin level $\geq 20\text{g/L}$
594	Anemia	Intermediate/major; colon cancer resection - hemicolectomy	Drop in hemoglobin level $\geq 20\text{g/L}$
676	Normal	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
679	Normal	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq 20\text{g/L}$
704	Normal	Intermediate/major; hysterectomy	Drop in hemoglobin level $\geq 20\text{g/L}$
710	Anemia	Intermediate/major; hiatal hernia repair	Gastrointestinal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
724	Normal	Low; transurethral bladder resection	Drop in hemoglobin level $\geq 20\text{g/L}$
728	Normal	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq 20\text{g/L}$
751	Anemia	Intermediate/major; — hemicolectomy	Gastrointestinal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
776	Polycythemia	Intermediate/major; laparotomy and cholecystectomy	Drop in hemoglobin level $\geq 20\text{g/L}$
782	Anemia	Intermediate/major; choledocus surgery	Gastrointestinal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion

784	Normal	Intermediate/major; hemicolecotomy	Drop in hemoglobin level $\geq$ 20g/L
788	Normal	Low; partial mastectomy	Local hematoma and drop in hemoglobin level $\geq$ 20g/L
789	Normal	Intermediate/major; hemicolecotomy	Drop in hemoglobin level $\geq$ 20g/L
797	Anemia	Intermediate/major; short bowel resection	Need for red blood cell transfusion
802	Normal	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq$ 20g/L
807	Normal	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq$ 20g/L
819	Normal	Intermediate/major; hysterectomy	Drop in hemoglobin level $\geq$ 20g/L
821	Anemia	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq$ 20g/L
825	Normal	Intermediate/major; ventral hernia repair	Drop in hemoglobin level $\geq$ 20g/L
828	Anemia	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq$ 20g/L
834	Normal	Intermediate/major; hemicolecotomy	Drop in hemoglobin level $\geq$ 20g/L
841	Polycythemia	Intermediate/major; ventral and inguinal hernia repair	Drop in hemoglobin level $\geq$ 20g/L
845	Normal	Intermediate/major; cholecystectomy	Drop in hemoglobin level $\geq$ 20g/L
847	Normal	Intermediate/major; hemorrhoid surgery	Drop in hemoglobin level $\geq$ 20g/L
855	Normal	Low; transurethral bladder resection	Drop in hemoglobin level $\geq$ 20g/L
856	Normal	Intermediate/major; hemicolecotomy	Drop in hemoglobin level $\geq$ 20g/L
863	Normal	Intermediate/major; cholecystectomy	Drop in hemoglobin level $\geq$ 20g/L
870	Normal	Intermediate/major; ventral and inguinal hernia repair	Drop in hemoglobin level $\geq$ 20g/L
881	Anemia	Intermediate/major; hemicolecotomy	Drop in hemoglobin level $\geq$ 20g/L
892	Normal	Intermediate/major; hip replacement	Drop in hemoglobin level $\geq$ 20g/L
897	Normal	Intermediate/major; hemicolecotomy	Drop in hemoglobin level $\geq$ 20g/L
903	Normal	Intermediate/major; hysterectomy	Drop in hemoglobin level $\geq$ 20g/L
905	Normal	Intermediate/major; hysterectomy	Drop in hemoglobin level $\geq$ 20g/L
914	Normal	Intermediate/major; oophorectomy	Drop in hemoglobin level $\geq$ 20g/L

931	Normal	Intermediate/major; hysterectomy	Drop in hemoglobin level $\geq 20\text{g/L}$
946	Normal	Low; partial mastectomy	Drop in hemoglobin level $\geq 20\text{g/L}$
951	Polycythemia	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
955	Normal	Intermediate/major; hip replacement	Local hematoma, drop in hemoglobin level $\geq 20\text{g/L}$
960	Anemia	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
963	Normal	Intermediate/major; knee replacement	Drop in hemoglobin level $\geq 20\text{g/L}$
973	Normal	Intermediate/major; hip replacement	Local hematoma and drop in hemoglobin level $\geq 20\text{g/L}$
983	Polycythemia	Low; urethral stone	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
991	Normal	Intermediate/major; colon cancer resection	Gastrointestinal bleeding and drop in hemoglobin level $\geq 20\text{g/L}$
995	Normal	Low; prolapse of the uterus	Vaginal bleeding and drop in hemoglobin level $\geq 20\text{g/L}$
996	Normal	Low; transurethral bladder resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
997	Polycythemia	Intermediate/major; knee replacement	Local hematoma and drop in hemoglobin level $\geq 20\text{g/L}$
1003	Anemia	Low; prolapse of the uterus	Vaginal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1009	Normal	Low; transurethral prostate resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
1030	Normal	Intermediate/major; hernia repair	Drop in hemoglobin level $\geq 20\text{g/L}$
1031	Normal	Low; bladder kidney stone extraction	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
1033	Anemia	Low; urethral stone extraction, prosthesis implantation	Hematuria, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1058	Normal	Intermediate/major; colon cancer resection	Gastrointestinal bleeding and drop in hemoglobin level $\geq 20\text{g/L}$
1061	Normal	Low; transurethral prostate resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$
1062	Normal	Low; transurethral prostate resection	Hematuria and drop in hemoglobin level $\geq 20\text{g/L}$

1064	Normal	Intermediate/major; adnexectomy	Intraabdominal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1068	Normal	Intermediate/major; colon cancer resection	Intraabdominal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1092	Normal	Intermediate/major; colon cancer resection	Gastrointestinal bleeding and drop in hemoglobin level $\geq 20\text{g/L}$
1098	Normal	Intermediate/major; colon cancer resection	Intraabdominal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1099	Normal	Intermediate/major; colon cancer resection	Gastrointestinal bleeding and drop in hemoglobin level $\geq 20\text{g/L}$
1116	Normal	Low; transurethral prostate resection	Hematuria, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1120	Normal	Intermediate/major; hysterectomy	Vaginal bleeding, fall in hemoglobin level $\geq 20\text{g/L}$
1124	Normal	Low; partial mastectomy	Local hematoma and the fall in hemoglobin level $\geq 20\text{g/L}$
1133	Polycythemia	Intermediate/major; hip replacement	Local hematoma and the fall in hemoglobin level $\geq 20\text{g/L}$
1144	Normal	Intermediate/major; hernia repair	Local hematoma and the fall in hemoglobin level $\geq 20\text{g/L}$
1159	Normal	Intermediate/major; rectal cancer	Intraabdominal bleeding, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1160	Normal	Low; transurethral prostate resection	Hematuria, drop in hemoglobin level $\geq 20\text{g/L}$, and the need for red blood cell transfusion
1161	Normal	Intermediate/major; sigmoid cancer	Intermediate/major; rectal cancer
1176	Normal	Intermediate/major; colon cancer resection	Postoperative drop in hemoglobin level $\geq 20\text{g/L}$
1193	Normal	Intermediate/major; hip replacement	Local hematoma and the fall in hemoglobin level $\geq 20\text{g/L}$