

Table S1 The incidence of VI

Subsets	VI absent	VI present	Overall
Right upper lobe	103 (48.4)	110 (51.6)	213 (100.0)
Left upper lobe	61 (33.5)	121 (66.5)	182 (100.0)
Bilateral upper lobes	164 (41.5)	231 (58.5)	395 (100.0)

Values are presented as n (%). VI, lateral vein.

Table S2 The drainage patterns of VI

Drainage sites	Number
RUL	110 (100.0)
V ¹ a	14 (12.7)
V ¹ a+ ² a	5 (4.5)
V ² a	10 (9.1)
V ² a+b	70 (63.6)
V ² b	3 (2.8)
V ² c	8 (7.3)
LUL	121 (100.0)
V ¹⁺² a	11 (9.1)
V ¹⁺² b	27 (22.3)
V ¹⁺² b+c	72 (59.5)
V ¹⁺² c	10 (8.3)
V ¹⁺² d	1 (0.8)

Values are presented as n (%); VI, lateral vein; V¹, apical segmental vein; V², posterior segmental vein; V¹⁺², apical-posterior segmental vein; RUL, right upper lobe; LUL, left upper lobe.

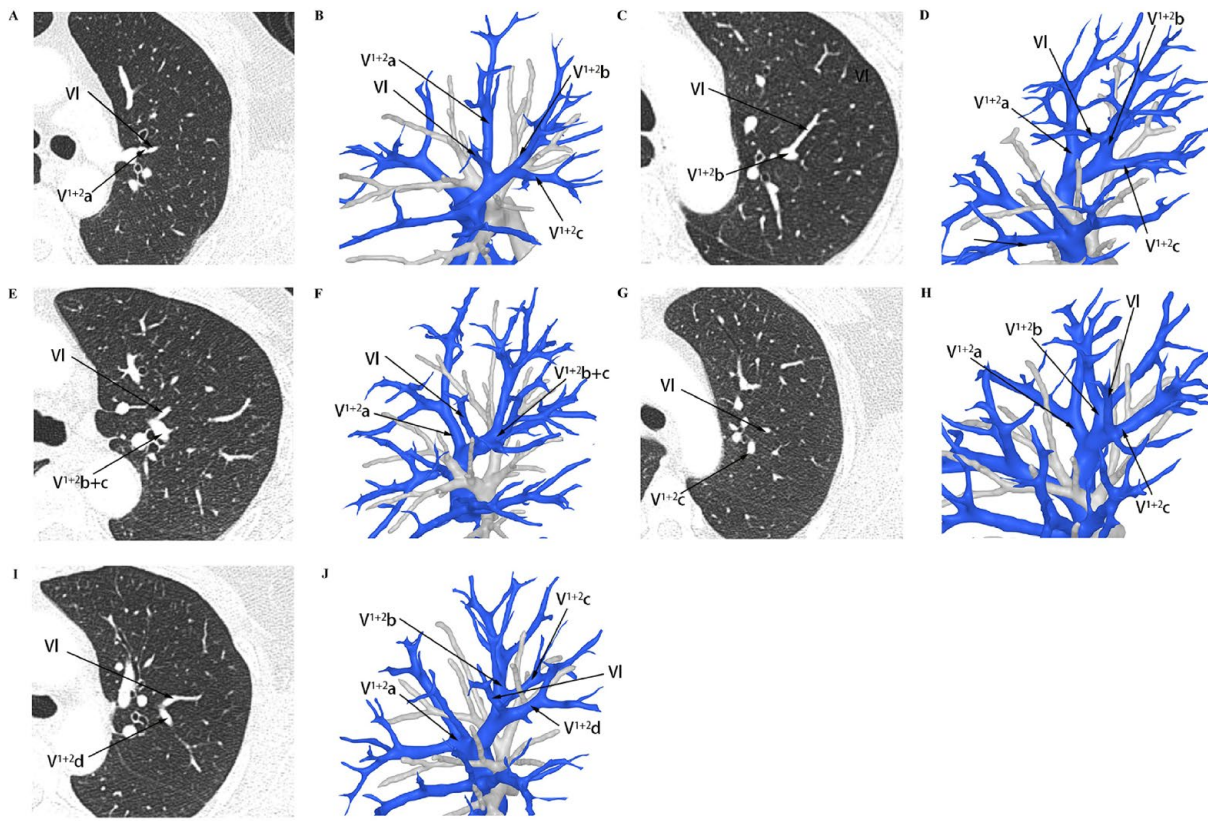


Figure S1 VI in the left upper lobe drained into (A,B) V^{1+2}_a , (C,D) V^{1+2}_b , (E,F) V^{1+2}_{b+c} , (G,H) V^{1+2}_c , (I,J) V^{1+2}_d . VI, lateral vein; V^{1+2} , apical-posterior segmental vein.

Table S3 The incidence of V^6_b

Subsets	V^6_{b1}	V^6_{b2}	V^6_{b3}
Right lower lobe	100% (160/160)	97.5% (156/160)	31.3% (50/160)
Left lower lobe	100% (131/131)	99.2% (130/131)	17.6% (23/131)
Bilateral lower lobes	100% (291/291)	98.3% (286/291)	25.1% (73/291)

V^6 , superior segmental vein.

Table S4 The drainage patterns of V^6_b

Drainage sites	Convergence with other branches of superior segmental veins	Convergence with common basal veins
V^6_{b1}	100% (291/291)	0% (0/291)
V^6_{b2}	93.4% (267/286)	6.6% (19/286)
V^6_{b3}	82.2% (60/73)	17.8% (13/73)

V^6 , superior segmental vein.

Table S5 The demographic and clinical characteristics of all patients

Subjects	Overall
Sex	
Men	254 (37.0)
Women	432 (63.0)
Age (years)	52.0 [44.0-70.0]
Nodule diameter (mm)	11.0 [9.0-14.0]
Nodule location	
RUL	213 (31.1)
LUL	182 (26.5)
RLL	160 (23.3)
LLL	131 (19.1)
Surgical modes of bilateral upper lobes	
Lobectomy	73 (18.5)
Left upper division resection	36 (9.1)
Other segmentectomy or subsegmentectomy	148 (37.5)
Wedge resection	138 (34.9)
Surgical modes of bilateral lower lobes	
Lobectomy	56 (19.2)
Basal segmentectomy	12 (4.1)
Other segmentectomy or subsegmentectomy	107 (36.8)
Wedge resection	116 (39.9)

Data are presented as n (%) or median [interquartile range]. RUL, right upper lung; LUL, left upper lung; RLL, right lower lung; LLL, left lower lung.

Table S6 The VIF values of the logistic regression model factors

Subsets	Diameter	CTR	Depth ratio	IMSVs
Bilateral upper lobes	1.057532	1.168781	1.02954	1.183905
Bilateral lower lobes	1.085095	1.097818	1.15931	1.096872

A VIF value of 1 indicates no correlation between a given independent variable and any other variables. VIF values exceeding 10 suggest significant multicollinearity that may require attention. VIF, variance inflation factor; CTR, consolidation tumor ratio; IMSV, inter-multisegmental vein.

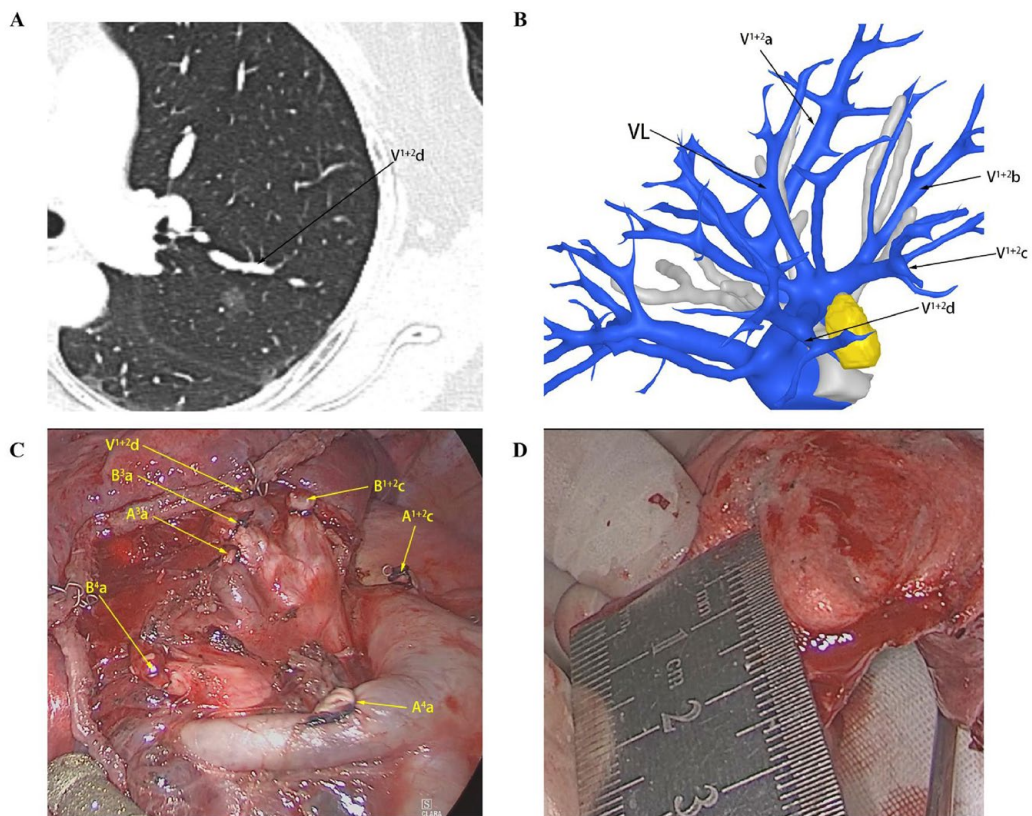


Figure S2 The influence of V¹⁺²d on surgical procedures. (A,B) 2D and 3D-CTBA data before surgery. (C,D) The remaining lung tissue and cutting margin after surgery. V¹⁺², apical-posterior segmental vein; 2D, two-dimensional; 3D-CTBA, three-dimensional computed tomography bronchography and angiography.