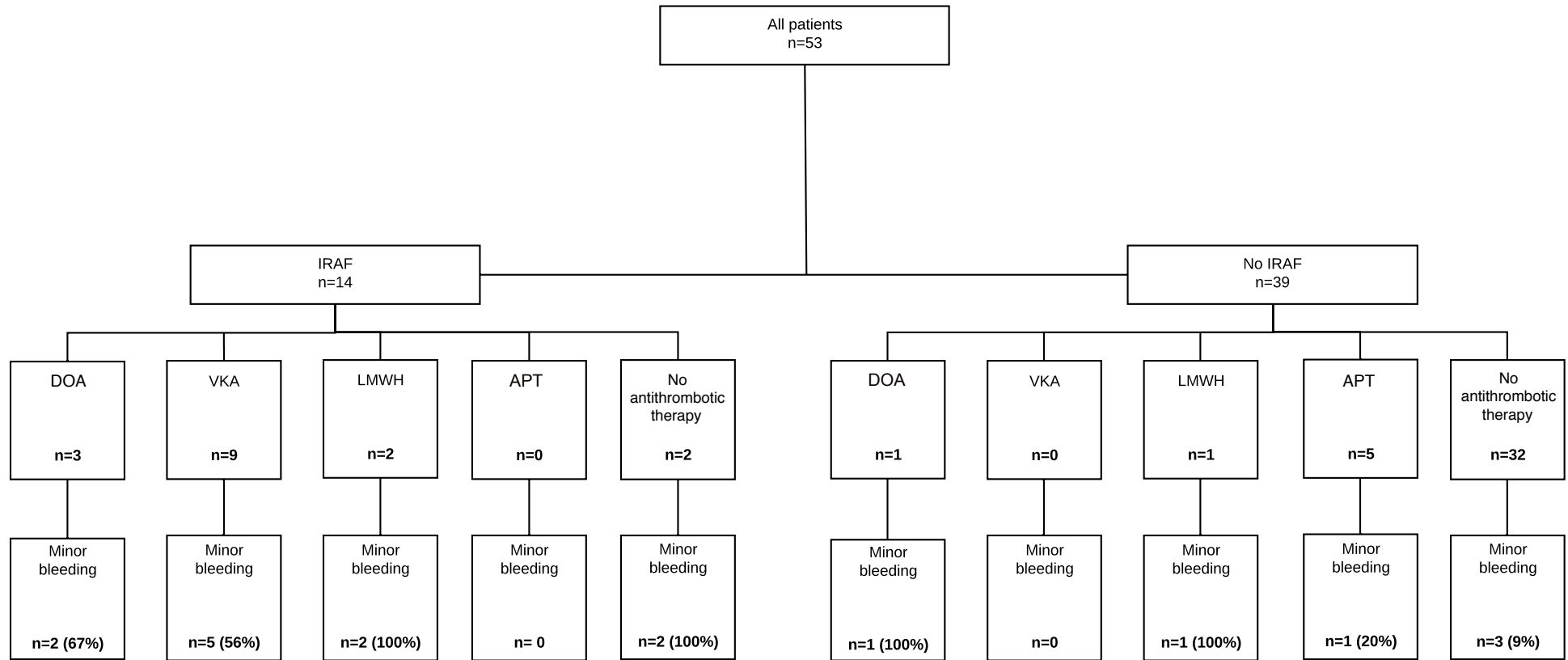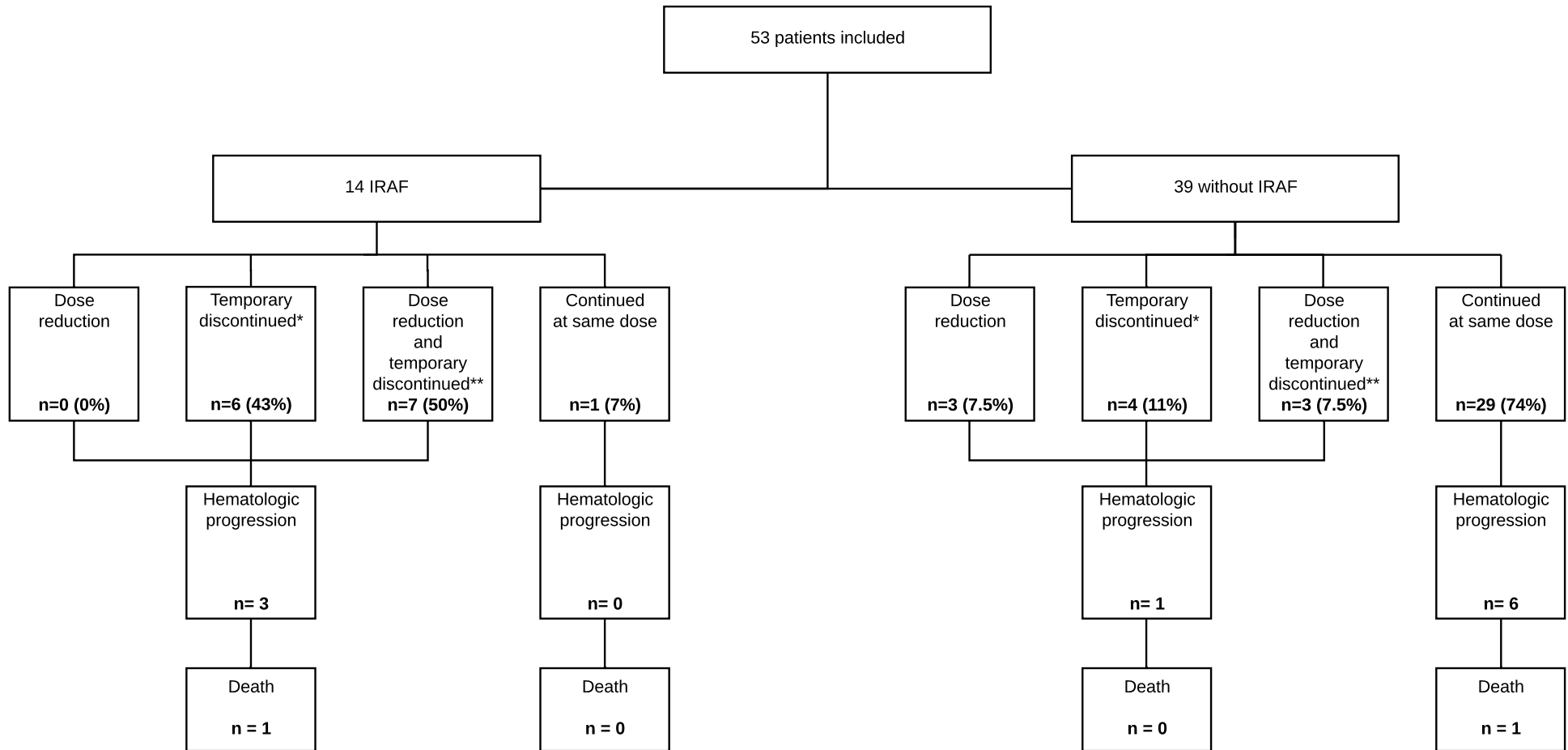# Supplementary Files

Supplementary File 1. Distribution of antithrombotic therapy and minor bleeding.
APT, antiplatelet therapy; DOA, direct oral anticoagulant; IRAF, ibrutinib-related atrial fibrilaltion; LMWH, low molecular weight heparin; VKA, vitamin K antagonist

```
                          ┌─────────────────┐
                          │  All patients   │
                          │     n=53        │
                          └────────┬────────┘
              ┌────────────────────┴────────────────────┐
        ┌───────────┐                              ┌───────────┐
        │   IRAF    │                              │  No IRAF  │
        │   n=14    │                              │   n=39    │
        └───────────┘                              └───────────┘
```

IRAF n=14					No IRAF n=39				
DOA n=3	VKA n=9	LMWH n=2	APT n=0	No antithrombotic therapy n=2	DOA n=1	VKA n=0	LMWH n=1	APT n=5	No antithrombotic therapy n=32
Minor bleeding n=2 (67%)	Minor bleeding n=5 (56%)	Minor bleeding n=2 (100%)	Minor bleeding n= 0	Minor bleeding n=2 (100%)	Minor bleeding n=1 (100%)	Minor bleeding n=0	Minor bleeding n=1 (100%)	Minor bleeding n=1 (20%)	Minor bleeding n=3 (9%)

Supplementary Files

Supplementary File 2. Management of ibrutinib therapy according to ibrutinib-related atrial fibrillation (IRAF).

```
                              ┌─────────────────────────┐
                              │   53 patients included  │
                              └─────────────┬───────────┘
                  ┌───────────────────────────┴───────────────────────────┐
          ┌───────┴────────┐                                      ┌────────┴─────────┐
          │    14 IRAF      │                                      │  39 without IRAF │
          └────────────────┘                                      └──────────────────┘
```

14 IRAF			
Dose reduction	Temporary discontinued*	Dose reduction and temporary discontinued**	Continued at same dose
n=0 (0%)	**n=6 (43%)**	**n=7 (50%)**	**n=1 (7%)**
	Hematologic progression		Hematologic progression
	n= 3		**n= 0**
	Death		Death
	n = 1		**n = 0**

39 without IRAF			
Dose reduction	Temporary discontinued*	Dose reduction and temporary discontinued**	Continued at same dose
n=3 (7.5%)	**n=4 (11%)**	**n=3 (7.5%)**	**n=29 (74%)**
	Hematologic progression		Hematologic progression
	n= 1		**n= 6**
	Death		Death
	n = 0		**n = 1**

Supplementary Files

Supplementary File 3. Details of patients who experienced ibrutinib-related atrial fibrillation (IRAF).

1st, first diagnosed AF; ABL, ablation; AR, antiarrhythmic drug; CTCAE, Common Terminology Criteria for Adverse Events v5.0; D, temporary suspension; DOA, direct oral anticoagulant; EC, electric cardioversion; ELR, external loop recorder; EHRA, European Heart Rhythm Association classification; LMWH, low molecular weight heparin; Ls, long-standing persistent AF; P, permanent AF;Pa, Paroxysmal AF; R, rate control; Re, reduced dose; U, unchanged; VKA, vitamin K antagonist

Patient	CTCAE 1	CTCAE 2	CTCAE 3	CTCAE 4	CTCAE 5	EHRA 1	EHRA 2	EHRA 3	EHRA 4	ECG	24h-Holter (n=4)	7d-ELR (n=17)	No	VKA	LMWH	DOA	R	AR	EC	ABL	Diag 1st	Diag Pa	Diag Ls	Diag P	End 1st	End Pa	End Ls	End P	U	Re	D
no.1	x									x				x			x				x							x			x
no.2*	x					x				x			x				x				x				x					x	
no.3	x					x					x			x				x				x				x				x	
no.4	x					x				x				x			x	x	x	x			x				x		x		
no.5			x						x		x			x	x	x	x	x					x					x		x	x
no.6				x					x	x			x								x				x						x
no.7	x					x						x				x		x				x				x			x		
no.8			x						x	x					x		x					x				x				x	
no.9	x					x				x						x	x				x				x				x		
no.10			x							x				x						x											x
no.11		x					x			x				x			x				x						x		x		
no.12		x					x			x				x			x				x						x		x		
no.13		x					x			x				x			x				x						x		x		
no.14		x					x			x				x			x				x						x		x		
Total	6	4	3	1	0	5	4		3	11	2	1	2	9	2	3	10	4	1	2	8	3	2	0	3	3	5	2	7	4	4