



# Are recurrences of post myocardial infarction VT due to substrate progression or insufficient index ablation?

#### A 4 years follow-up study



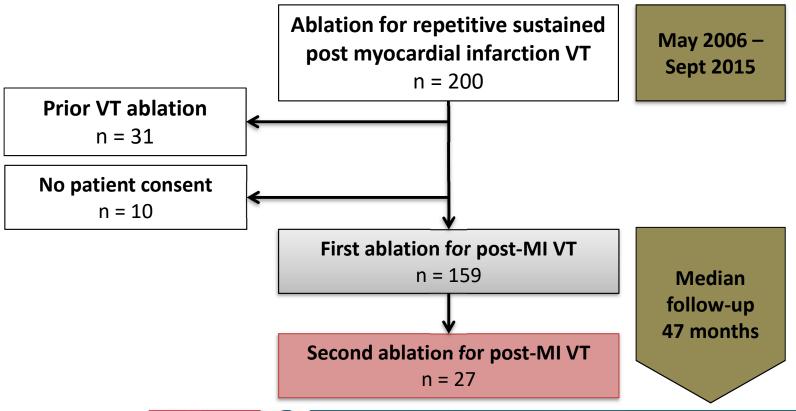
Anna Lam, Michael Wolf, Takeshi Kitamura, Konstantinos Vlachos, Felix Bourier, Masateru Takigawa, Claire Martin, Antonio Frontera, Frédéric Sacher, Nicolas Derval, Arnaud Denis, Thomas Pambrun, Josselin Duchateau, Mélèze Hocini, Michel Haïssaguerre, Pierre Jaïs

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# Study Population











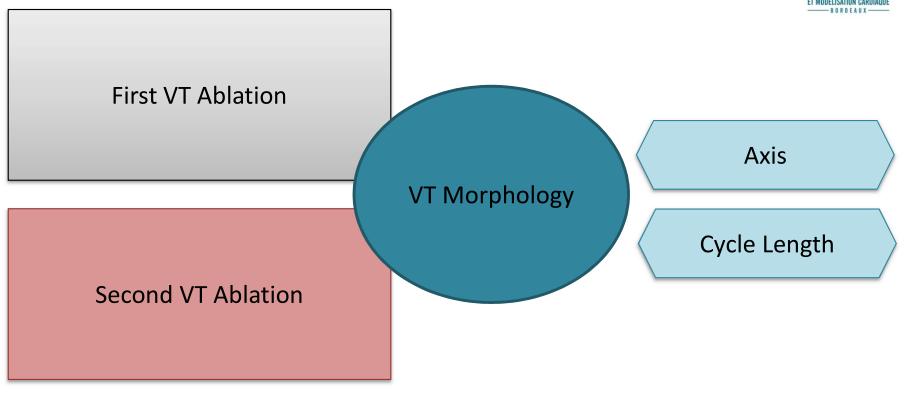


	1st ablation n=159	2nd ablation n=27
Age, y	65 ± 11	61 ± 12
Male	152 (96%)	27 (100%)
LVEF, %	34 ± 11	35 ± 14
Beta-blocker	153 (96%)	23 (85%)
Sotalol / class I	17 (11%)	5 (19%)
Amiodarone	118 (74%)	9 (33%)
ICD	146 (92%)	27 (100%)



### Methods





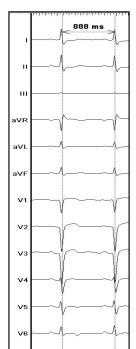




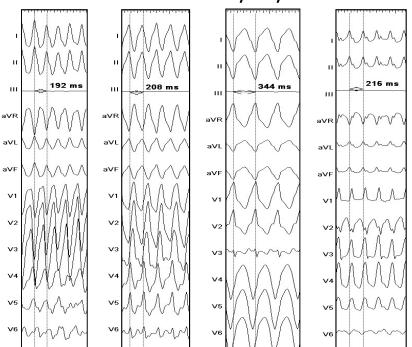
# VT during first and 2nd ablation



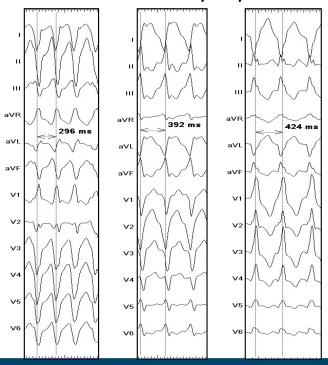




#### 1<sup>st</sup> ablation 17/10/2013

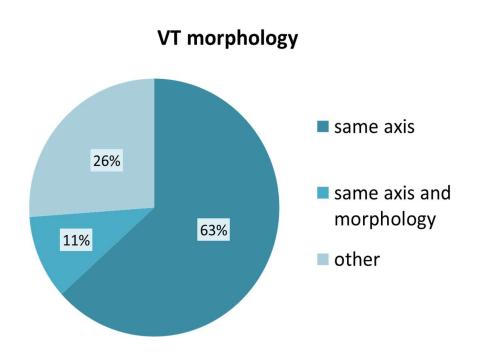


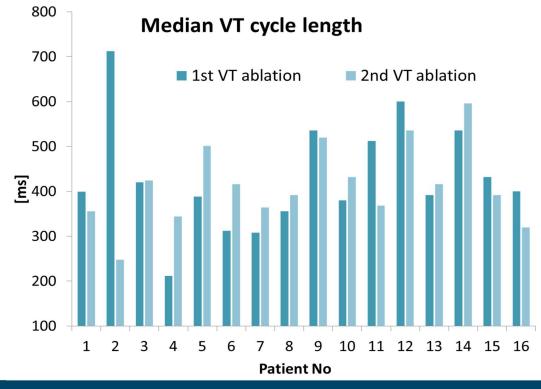
2<sup>nd</sup> ablation 11/09/2015



### 12 lead ECG





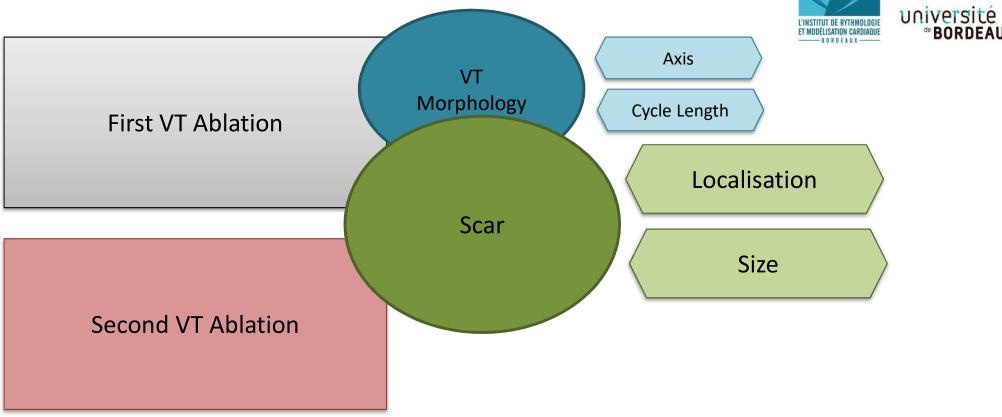






### Methods



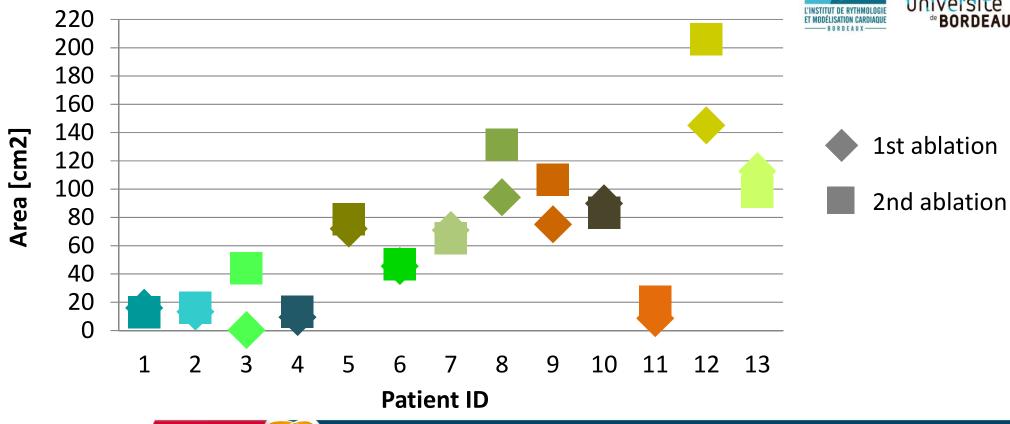






# Scar size during first and 2<sup>nd</sup> ablation

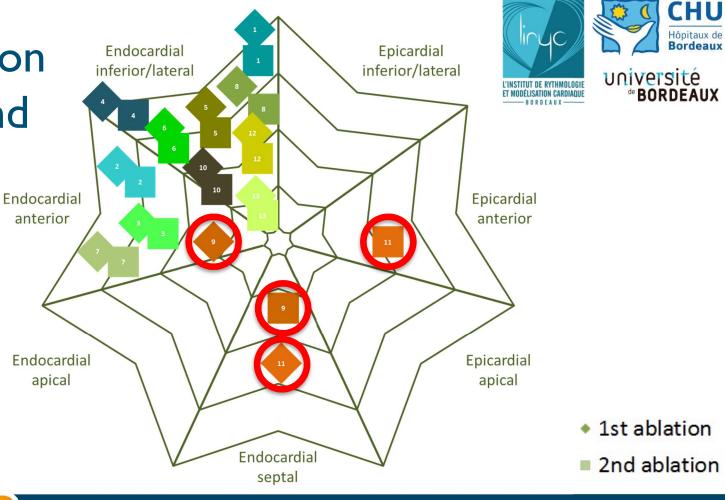






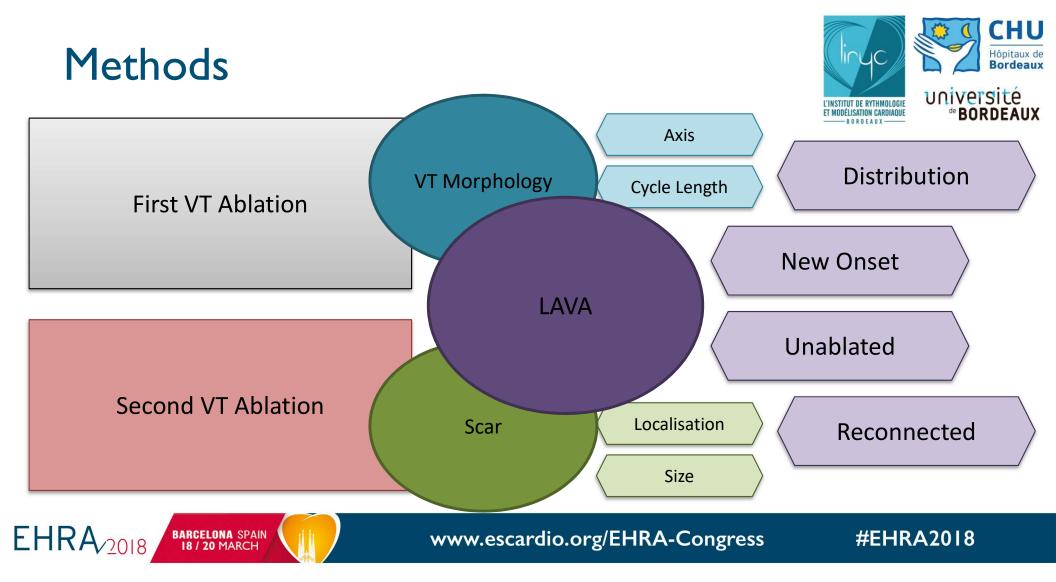


Scar localisation during first and 2<sup>nd</sup> ablation

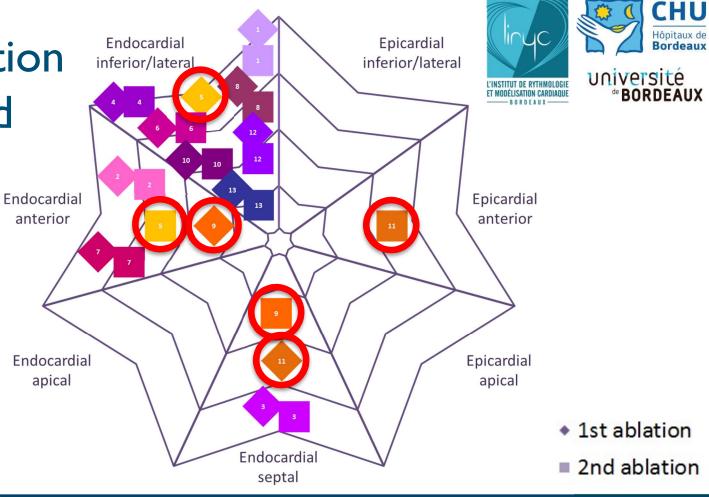








LAVA distribution during first and 2<sup>nd</sup> ablation

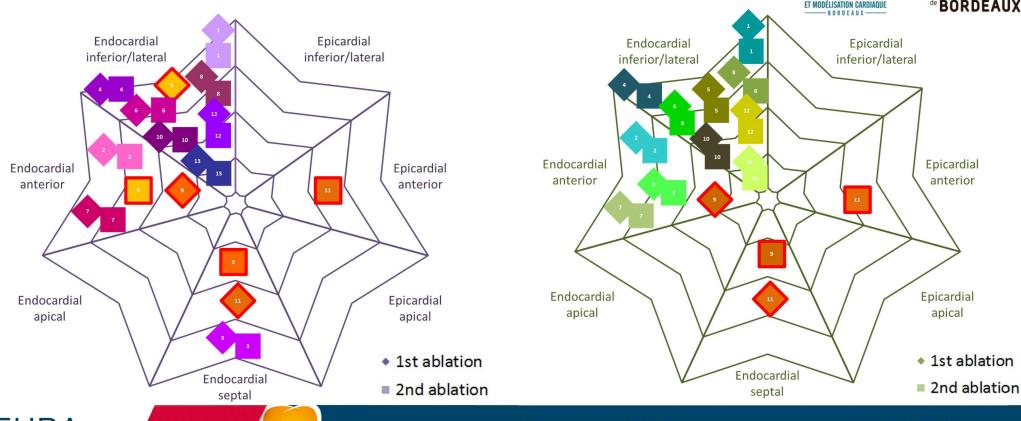






### LAVA distribution vs Scar localisation





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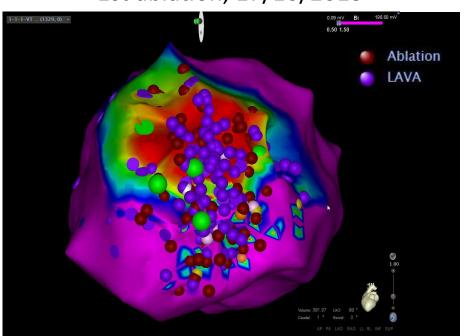
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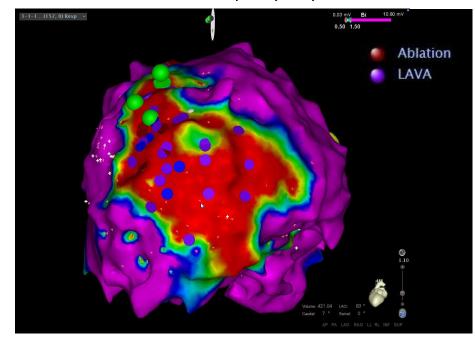
### LAVA, Scar and Ablation Points



1st ablation, 17/10/2013



2nd ablation, 11/09/2015



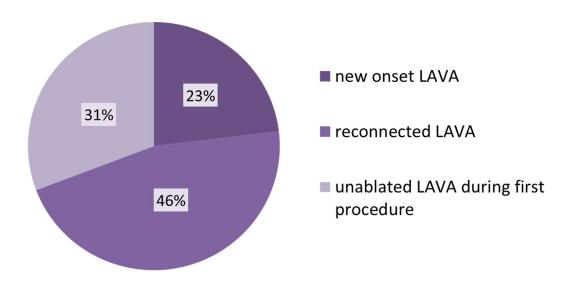




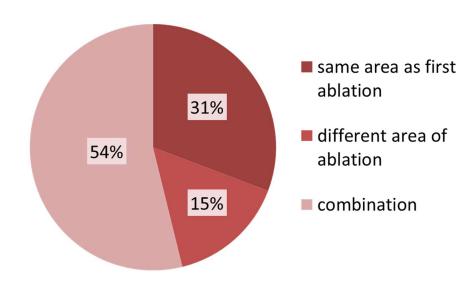
### Second VT Ablation



#### LAVA characteristics during second VT ablation



#### Ablation area during second VT procedure







### Conclusions



- Arrhythmogenic substrate and scar unchanged
- Reconnected and un-ablated LAVA most common
- VT recurrences due to incomplete or insufficient index substrate ablation (77%)





# Thank you!



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