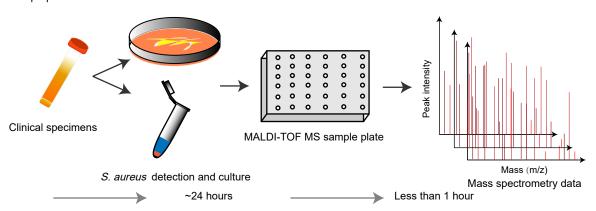
a Data preparation



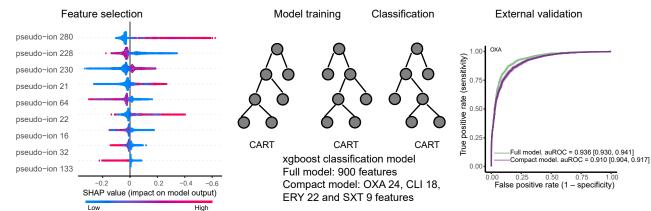
b Data pre-processing

Ion-wise intensity matrices Maldi-TOF mass spectra peak intensities								
X _{in}	Sample 1	Sample 2	Sample 3	Sample				
lon 1	1287	0	0	8364				
lon 2	0	27056	0	7519				
lon 3	10900	0	7661	0				
lon i	0	0	561	0				

Pseudo-ion-wise intensity matrices (m=i/20) Binning normalization with bin size 20 Da

\mathbf{X}_{mn}	Sample 1	Sample 2	Sample 3	Sample n
Pseudo- ion 1	357.8	5516.2	3732.7	8317.5
Pseudo- ion 2	8589.3	7498.9	6677.0	11571.3
Pseudo- ion 3	6623.1	14625.8	9913.8	6391.9
Pseudo- ion m	725.0	1517.3	158.2	914.4

c Drug resistance prediction model



d Multi-drug resistant risk evaluation score

