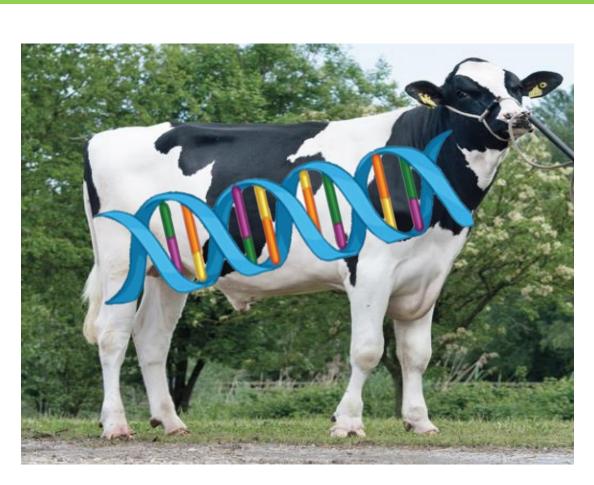


## Use of DNA in animal breeding icof





## Advancing genomic evaluations



Relate DNA

ACCG



to performance

ATCG

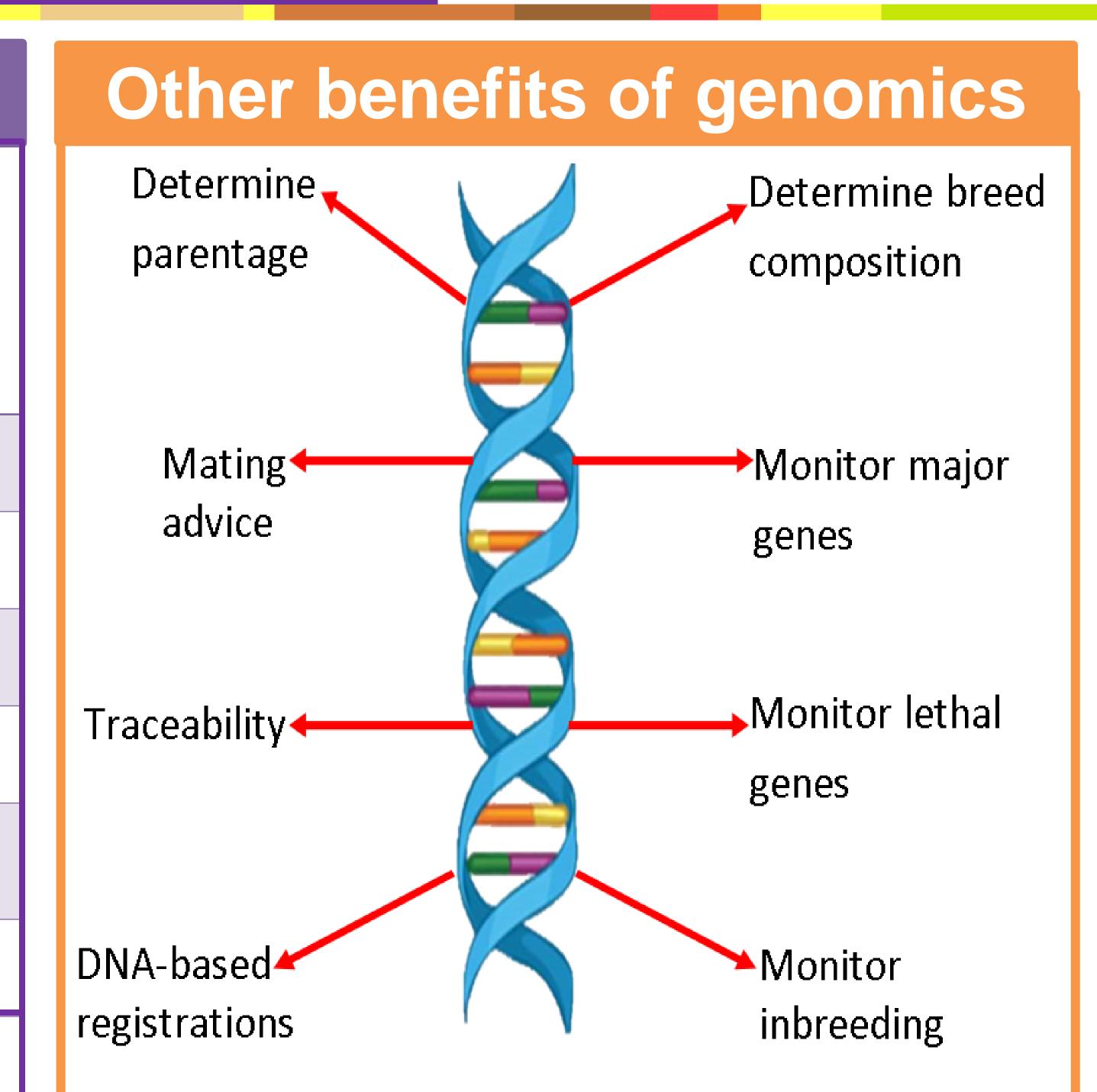


Reference population

- Knowledge of the association between DNA and performance enables genomic predictions
- Including cows in the reference population increases the accuracy of such predictions:

Trait	Parent average	Reference population	
accuracy		Sires only	Sires & cows
Milk	0.61	0.68	0.73
Fat	0.43	0.56	0.62
Protein	0.51	0.64	0.68

Minimize risk			
Herd size	Minimum		
(incl.	number of		
heifers)	bulls		
51-100	7		
101-150	8		
151-200	10		
201-250	11		
251-300	12		
301-350	13		
Bull team reliability ≥95%			



## Take home messages

- 1. Genomics increase EBI reliability
- 2. All the benefits of genomics can be achieved through DNA calf registration