



## BMDW BiteSize

# Learning

### The sorting order in search reports

This week's topic is focused on the sort order within a donor report. The default sorting criteria from the algorithm are:

1. HLA
2. probability in 10% intervals
3. donor age in 5 year intervals

Therefore within BMDW, after HLA the system then sorts on probability in groups of 10% intervals and then donor age in 5 year intervals. For example within the example figure below:

+	<b>P P P P P</b>	02:JJB 03:GTD	07:NYU 39:NZM	15:PBV 11:PBG	3*02:KAA 5*01:BFK	6354 GB-Anthony	37 Male
+	<b>P P P P P</b>	2 3	7 39	11:DFYR 15:DKYC		6939 DE-ZKRD	39 Female
+	<b>P P P P P</b>	02:XX 03:XX	07:02 39:XX	11:01 15:AG	3*02:BMP 5*01:XX	6939 DE-ZKRD	39 Female
+	<b>P P P A P</b>	2 3	7 39	11:01:01 15:01:01		6939 DE-ZKRD	39 Female
+	<b>P P P A P</b>	02:XX 03:XX	07:XX 39:XX	11:01 15:01	3*02:BMP 5*01:BMK	6939 DE-ZKRD	41 Male

Donor 402 is 58% 10/10 while 403 is 59% 10/10; the probabilities for 1 or 2 mismatches are for both donors the same, as well as age and gender. However, why is a donor with a probability of 58% to become a 10/10 matched donor appearing above a donor with a probability of 59%?

In such a scenario 58% and 59% is not a difference relevant for sorting as the probability is grouped in 10% intervals. Also age, the secondary criteria for sorting, is not affecting the sorting in this case, because the age of the donors is similar. Therefore, donors with the same age and 10% interval probability will be randomly sorted among each other in the search results.

