Witness Name: Dr Gary Benson Statement No.: WITN3082035 Exhibits: WITN3082036 -WITN308240 Dated: 25 September 2023

INFECTED BLOOD INQUIRY

WRITTEN STATEMENT OF DR GARY BENSON

I provide this statement in response to the request under Rule 9 of the Inquiry Rules 2006 dated 3 November 2022.

I, Dr Gary Benson, will say as follows: -

Section 1: Introduction

- My name is Dr Gary Benson. My professional address is NI Haemophilia Centre, Belfast City Hospital, Lisburn Road, BT9 7AB. My date of birth is GRO-C
 GRO-C 1976. My professional qualifications are as follows; MB, BCh, BAO, FRCP, FRCPath.
- 2. I have held the following positions:-
 - JHO Aug 1999-July 2000: Altnagelvin Hospital, Western Health and Social Care Trust.
 - SHO Aug 2000-July 2001: General Medicine, Altnagelvin Hospital, Western Health and Social Care Trust.
 - SHO Aug 2001-Jan 2002: General Medicine, Causeway Hospital, Northern Health and Social Care Trust.

- SHO Feb 2002-July 2002: Clinical Oncology, Belvoir Park Hospital, Belfast Health and Social Care Trust.
- SHO Aug 2002-Jan 2003: Clinical Haematology, Belfast City Hospital, Belfast health and Social Care Trust.
- Specialist registrar Feb 2003-Jan 2007: Haematology, Belfast City Hospital, Belfast Health and Social Care Trust.
- Specialist registrar Feb 2007-Jan 2008: Haematology, East Of Scotland Haemophilia Comprehensive Care Centre, Royal Infirmary Edinburgh.
- Consultant Haematologist with a specialist interest in disorders of haemostasis: Feb 2008 – present, Belfast City Hospital, Belfast Health and Social Care Trust. This post includes the role of Director for the NI Haemophilia Comprehensive Care Centre in leading and delivering the care to patients in NI with congenital and acquired bleeding disorders. The majority of work revolves around those who attend the adult centre but also undertaken a clinic alongside the paediatric haematologist.
- I am the laboratory lead for specialty coagulation and run the regional specialty coagulation laboratory for NI.
- I am the Clinical Director for Blood Sciences within the Trust.

Section 2: Responses to criticism by Witness W0096

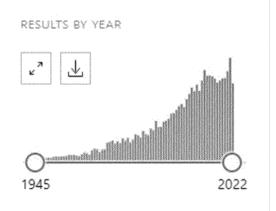
3. At paragraph 20 of her statement (WITN0096008), Witness W0096 stated the following: "Any doctor I have told agreed that it was not possible to grow out of a hereditary condition. Are Dr Gary Benson and the Haemophilia Society mistaken? or are they covering something up?"

Blood results

 The table below shows the blood results for Witness W0096, taken on 5 May 2021 and on 12 January 2022 (WITN3082036). Blood group: O RhD pos

	05.05.21	12.01.22	Lab normal range
VW: Ag	1.03	1.19	(0.7-2.0 iu/mL)
VW: Act	1.34	1.70	(0.58-1.96 iu/mL)
fVIII	1.13	1.03	(0.6-1.3 iu/mL)

 Below is a view of the number of publications over the years using the search 'Von Willebrands disease' on the PubMed website.¹



- 6. In 1980 107, 1990 179, 2000 291, 2010 467, 2020 522 peer review published articles. During the same time frame, guidelines on diagnosis as well as management have been written and rewritten by multiple learned societies. Perhaps more so than any other bleeding disorder, the pace of research to improve understanding has progressed at pace.
- 7. Ageing is associated with an upregulation of the blood clotting system with increased levels of von Willebrand factor (VWF), amongst others.
 - Sanders YV, Giezenaar MA, Laros-van Gorkom BAP, Meijer K, van der Bom JG, Cnossen MH, Nijziel MR, Ypma PF, Fijnvandraat K, Eikenboom J, Mauser-Bunschoten EP, Leebeek FWG, for the WiN study group. <u>von</u>

¹ https://pubmed.ncbi.nlm.nih.gov/?term=von+willebrands+disease

<u>Willebrand disease and aging: an evolving phenotype</u>. J Thromb Haemost 2014; 12: 1066–75 (WITN3082037).

- 8. Von Willebrand factor parameters and bleeding phenotype evolve with increasing age in VWD. VWF and FVIII levels increase with age in type 1 patients. A decade age increase was associated with a 3.5 U dL¹ (95% CI, -0.6 to 7.6) VWF:Ag increase and 7.1 U dL¹ (95% CI, 0.7 to 13.4) FVIII:C increase approximately 10% per decade.
 - Increase of von Willebrand factor with aging in type 1 von Willebrand disease: fact or fiction? Haematologica 2017; 102:e431 (WITN3082038).
- 9. When patients were subdivided for severity in mild (baseline VWF:Ag and VWF:RCo >0.3 <0.5 IU/ml, group 1, n=143) and moderate VWD (baseline VWF:Ag and VWF:RCo ≤0.3 IU/ml, group 2, n=52), a significant increase of VWF with ageing was confirmed in the mild VWD subgroup. Interestingly, the frequency of blood group O was significantly higher in the milder group than in the moderate group.</p>
 - <u>The relationship between ABO blood group, von Willebrand factor, and</u> <u>primary haemostasis</u>. Blood 17 December 2020, Volume 136, Number 25 (WITN3082039).

10.ABO affects multiple aspects of von Willebrand factor (VWF) biology. Plasma VWF levels are ~25% lower in healthy group O compared with healthy group non-O individuals.

• <u>Can you grow out of von Willebrand disease?</u> Haemophilia. 2017;23:807–809 (WITN3082040).

- 11. The net effect reported was that non-O individuals can expect their VWF:Ag to rise from a mean of 0.98 to a mean of 1.68 iu/ mL between childhood and old age, while group O rise from mean 0.85 to 1.11 iu/mL. These data suggest that for patients with a significant bleeding history, a rise into the range 0.3-0.5 will likely reduce their bleeding risk and a rise to >0.5 will reduce it further.
- 12. Those with low levels, will experience a beneficial rise even if they do not achieve fully haemostatic levels. For some, whose VWF was in the borderline range, VWF may enter the normal range, which will reduce their bleeding risk.
- 13. In line with the research, publications and most up to date information, Witness W0096's blood results fall well within the normal reference for von Willebrand antigen and activity as measured within the laboratory. These levels are not in keeping with a current diagnosis of von Willebrand's disease.

Statement of Truth

I believe that the facts stated in this witness statement are true.



Dated 25th September 2023

Table of exhibits:

Date	Notes/ Description	Exhibit number
05/05/2021 - 12/01/2022	Blood results for Witness W0096	WITN3082036
2014	Article titled: "Willebrand disease and aging: an evolving	WITN3082037

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	phenotype", Journal of Thrombosis and Haemostasis, 12: 1066–1075 2014	
2017	Article titled: "Increase of von Willebrand factor with aging in type 1 von Willebrand disease: fact or fiction?", Haematologica 2017	WITN3082038
17/12/2020	Article titled: "The relationship between ABO blood group, von Willebrand factor, and primary haemostasis", Blood 17 December 2020, Vol. 136 No. 25	WITN3082039
2017	Article titled: "Can you grow out of von Willebrand disease?", Haemophilia, 2017, 23:807-809	WITN3082040