Potential impact of AUSFTA on Australia's blood supply

Hilary J Bambrick, Thomas A Faunce and Kellie Johnston

ABSTRACT

- Australia is largely self-sufficient in its supply of safe, fresh blood products because of the goodwill of non-remunerated, volunteer donors, plus rigorous testing and processing standards.
- CSL Limited is the sole provider of plasma fractionation services in Australia, enjoying exclusive rights under the Plasma Fractionation Agreement with the Australian Government.
- In the Australia–United States Free Trade Agreement (AUSFTA), Australia agreed to review its current contract with CSL Limited, and to recommend to the states and territories that the process be opened up to overseas tender.
- Overseas tenders for off-shore fractionation services are likely to be highly competitive due to their low manufacturing costs and accumulated expertise.
- Off-shore fractionation could compromise the safety of Australia's blood supply through delays in processing and transportation, issues related to quality control, and even the siphoning of stock to overseas markets. This could compromise the long-term care of Australian patients and create a serious national security risk in the event of a terrorist attack or natural disaster.
- Australia's AUSFTA obligation to recommend changes does not equate to an obligation to actually proceed. The states and territories should carefully consider whether such changes would be in our national interest.
- The long-term security of the Australian people in the current security environment is dependent on continuance of an on-shore fractionation plant and appropriate back-up facilities.

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Australia, under the National Blood Agreement, has a policy of "self-sufficiency" in fresh blood and plasma products. The policy refers to effort rather than outcome, with self-sufficiency defined as "striving to meet clinical demands using local product".[1] In recent years, increasing amounts of plasma-derived and recombinant products have been imported (with limited policy debate). However, for the most part, plasma products continue to be derived from Australian donations and processed in Australia (Box 1).[2] Whole blood, plasma and platelets from non-remunerated, volunteer donors are collected by the Australian Red Cross Blood Service, and tested for HIV, hepatitis B and C, HTLV-1 and -2, syphilis, and for cytomegalovirus (to protect recipients with immune deficiencies).[3]

On 1 January 2005, the Australia–United States Free Trade Agreement (AUSFTA) came into force.[4] A side letter to this agreement opens the way for the importation of blood and plasma-derived products to increase considerably above current levels. In this article, we raise several specific concerns relating to AUSFTA and the safety, quality, and security of supply of Australia's blood and plasma products. We also argue that AUSFTA creates additional uncertainties by increasing the potential for policy lobbying based on the threat of so-called "non-violation nullification of benefits" disputes, although we maintain these must be restricted to unambiguous textual obligations.[5]

Australia's blood and plasma products and AUSFTA

Chapter 15 of AUSFTA (Government Procurement) established an obligation that government contracts for goods and services must be equally open to suppliers in both countries.[6] A specific annex*, however, excluded from this obligation "the procurement of plasma fractionation services" in Australia.[7]

Nevertheless, in May 2004, the United States Trade Representative and the Australian Minister for Trade undertook an exchange of side letters† (a binding part of AUSFTA) on blood products and plasma fractionation services (Box 2).[8] Central to these obligations is an expiry date for the present contract — the Plasma Fractionation Agreement with CSL Limited — and the creation of a review process to consider opening up blood services to competitive overseas tender. This Review of Australia's Plasma Fractionation Arrangements took written submissions in March and April 2006 and is due to report by 1 January 2007.[9] Submissions may be made publicly available once the Review is finalised, but any submissions containing commercial-in-confidence material, or where authors indicate that the submission is not to be made public, will not be published.

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* The annexes of the AUSFTA are attached to the respective Chapters; they are part of the text of the Agreement and are legally binding.

† Side letters are used in the AUSFTA in three main ways: (1) to provide additional clarification on how a particular provision of the Agreement will apply; (2) to make additional commitments that apply only to one country; (3) to confirm to the other country how a nation's current policies or systems operate.

Only the first two categories constitute an "integral part of the Agreement" and are legally binding.

The Review is described as "independent",[10] but the Australian Government is committed under AUSFTA to recommend to the states and territories that future fractionation arrangements be put out for tender. The Review's recommendations may thus shape the conditions on which the Australian Government makes that recommendation, or its implementation, should state and territory agreement be obtained.

The terms of reference of the Review include safety, quality, security of supply, efficacy and cost. Our concerns relate particularly to the first three of these.

Payment for blood donation and safety concerns

Safety of the Australian blood supply should not be taken for granted. Blood is a scarce global commodity; paid donors in developing countries are becoming an increasingly important source of the world's plasma.[11] In the US, some plasma donors receive about US$25 per donation or up to US$200 per month, depending on how often they donate, their blood type and the

1 Sources of blood and plasma products[2]

Australian Red Cross Blood Service

Fresh blood products — whole blood, red blood cells, platelets, frozen plasma, cryoprecipitate, buffy coat (white cells), plasma for fractionation

CSL Limited

Albumin, immunoglobulin (Rh(D), IVIg [intravenous infusion of immunoglobulins] and hyperimmune products), plasma-derived clotting factors, blood grouping sera, reagent red cell products, Factors XI and XIII

Baxter Healthcare Pty Ltd

Recombinant Factor VIII, Protein C, Factor VII concentrate, Factor Eight Inhibitor Bypass Agent (FEIBA)

Wyeth Australia Pty Ltd

Recombinant Factor IX

Novo Nordisk Pharmaceuticals Pty Ltd

Recombinant Factor VIIa

Octapharma (Australia) Pty Ltd

Immunoglobulin IVIg ◆

specificity of their serum antibodies.[12] Referring others to a particular collection company earns donors an additional finder's fee.[13] Reviews have consistently found that paid blood donors are more at risk of emergent infectious disease and are more likely to donate in symptomless "window" periods.[14,15] In short, blood sourced from paid donors is less safe than blood from non-remunerated donors.[16] For example, a recent study in São Paulo, Brazil, found that paid donors were twice as likely as non-remunerated donors to test positive to Chagas disease.[17] The substantial immigration of people to the US from Central and South America may therefore have significant consequences for the safety of the US blood supply, especially given that greater disadvantage among migrant groups may lead higher-risk people to donate to supplement their low income. Such factors have led to major concerns about the safety of blood products in the US,[18] where paid donation accounts for about 55% of the blood supply.[19]

Paying for blood may not actually increase much needed supply. A UK study found that while some non-donors rated themselves as more likely to donate if they were to be paid, a similar number of existing volunteer donors reported a contrary conclusion.[20] Further, public health concerns over payment for blood and plasma must also consider that, by providing payment, those most vulnerable may be encouraged to donate too frequently, causing undue and potentially long-term harm to their own health.

Australia's blood safety precautions

The current battery of safety tests performed on blood collected in Australia is neither perfect in coverage nor in accuracy. Donors are therefore restricted to people who are healthy and considered to be at low risk of blood-transmissible disease.[3] For example, the Australian Red Cross Blood Service does not accept donations from people who have been in prison within the previous 12 months, or those who have had a recent tattoo or piercing. Obviously, blood cannot be screened for as yet unidentified or newly emergent diseases, as transmission of HIV and hepatitis C to blood product recipients in the 1980s in Australia (and elsewhere) attests. There is still no test to detect variant Creutzfeldt–Jakob disease.[3] Australian national self-sufficiency in blood and plasma is therefore desirable given the greater risks resulting from paid donations in other countries.

For plasma, the Therapeutic Goods Administration tracks each item donated and approves the circumstances of collection and processing of imported products.

Plasma fractionation arrangements in Australia

CSL Limited is currently the sole provider of plasma fractionation services in Australia, enjoying exclusive rights under the Plasma Fractionation Agreement with the Australian Government. Until 2005, CSL provided most of the clotting agents used in haemophilia care. However, since the government's decision to fund recombinant therapy, about 85% of haemophiliacs use imported clotting agents[21] purchased from four other pharmaceutical companies (Box 1), which share in annual business worth $90 million.[2] The Plasma Fractionation Agreement between the Commonwealth Government and CSL is due to end in December 2009, but the AUSFTA exchange of side letters indicates it can be terminated earlier.[22]

Implications of overseas tendering for plasma fractionation

If a large overseas company were to use its legal expertise and economies of scale to gain this further business, one probable scenario would be that plasma donated in Australia could be shipped overseas for fractionation and then returned. In such circumstances, there is a possibility that essential safety measures — though specified in written guidelines — might not be as rigorously monitored as they are in Australia. As CSL is already one of the world's largest fractionators and obtains source product free of charge, any greater "efficiency" from competitive tendering may be the result of cost-cutting on safety infrastructure or procedures.

A second scenario is that a successful overseas tenderer could take over the CSL plant, but the resultant reorganisation could incrementally introduce standards and practices less effective than those presently in place. For example, cost-cutting may promote an increase in batch size, escalating both the chance of contamination and the number of people potentially affected. Recall capacity and timely donor tracing may be diminished.

Changing Australia's plasma fractionation arrangements would also affect products in other countries. CSL is the national provider of fractionation services to New Zealand, Malaysia, Hong Kong and Singapore.[2] Further, Australia's recent agreement with New Zealand to establish a Trans-Tasman joint regulatory agency on therapeutic goods may mean that New Zealand will be required to open its own processing arrangements to tender, or could be forced to "piggyback" with new Australian arrangements.

Finally, shipping plasma offshore for processing would reduce Australia's capacity to rapidly respond to a major emergency such as a natural disaster or terrorist attack (where large quantities of plasma are required urgently), or to contaminated supply, particularly if international transportation is hampered.

AUSFTA and further concerns about a safe blood supply

Of further concern is that a proportion of Australia's cheap and comparatively safe blood supply could be siphoned off into

overseas markets, where it would be highly valued as a low-risk product, being sourced from non-remunerated donors.

There is also little in AUSFTA to prevent future tendering for the *collection* of blood and plasma by for-profit companies as well, potentially igniting competition for donors, loss of reliance on volunteer donations, and reduced safety of the blood supply. It is foreseeable that non-remunerated donations to the Australian Red Cross Blood Service could diminish in such an environment, driving up the costs of sourcing plasma and cellular products through the provision of payment to donors. It would cost more to obtain the same — or lesser — amount of product.

AUSFTA also opens the door to the importation of more blood products from the US and elsewhere, from paid sources within the US and from the poor in developing countries, as Australia no longer requires that a US product demonstrates significant clinical advantage over an Australian produced product (Box 2, Paragraph 6).

Scope for potential breaches of AUSFTA

An additional concern from the AUSFTA side letter on blood products is Australia's commitment to recommend that competitive tenders be linked to a non-violation nullification of benefits (NVNB) article in Chapter 21.2(c) (Box 2). An NVNB claim can be made in cases where it is argued that the "spirit" of a thoroughly unambiguous (clearly agreed) treaty provision has been breached, even in the absence of any technical (actual) contravention. The World Trade Organization (WTO) has held that such claims require detailed justification and, despite US objections, has recently continued a moratorium on their use under the Trade-Related aspects of Intellectual Property Rights ("TRIPS") Agreement.[23] In one dispute case, *European Communities — Measures Affecting Asbestos and Asbestos-Containing Products,* the Appellate Body agreed with a previous panel[24] that NVNB claims "should be approached with caution and should remain an exceptional remedy".[25] It explicitly left open the question of whether a party could have "reasonable expectations" for NVNB purposes in relation to "continued market access for products which are shown to pose a serious risk to human life or health".[25] It is uncertain how NVNB claims interact with Article 26 of the *Vienna Convention on the Law of Treaties*, incorporating the principle of *pacta sunt servanda*: "Every treaty in force is binding upon the parties to it and must be performed by them in good faith".[26] NVNB claims appear to undermine this fundamental principle of international law by subsequent reinterpretations based on the "spirit" of the agreement. In this case, the Australian Government has only agreed to *recommend* overseas tendering for plasma fractionation. If that recommendation is made, but the states and territories decide to deny overseas tenders, the US may lobby for, but cannot legally enforce, an ambit NVNB claim against Australia. Would such lobbying efforts undermine the rule of law in international relations by seeking to enforce the "spirit" of a non-existent or deliberately vague obligation to actually open up plasma fractionation to competitive tender?

2 Australia–United States Free Trade Agreement exchange of side letters on blood plasma and blood fractionation services[8]

1. Any contract with a central government entity of Australia for blood fractionation services in effect on the date of entry into force of the Agreement shall conclude no later than 31 December 2009, or earlier if Australia deems it appropriate.

2. Australia shall undertake a review of its arrangements for the supply of blood fractionation services that shall conclude no later than 1 January 2007. The Commonwealth Government will recommend to Australia's States and Territories that future arrangements for the supply of such services be done through tender processes consistent with Chapter 15 (Government Procurement) of the Agreement.

3. Should the Commonwealth and State and Territory governments reach agreement [to move] to tender processes consistent with Chapter 15, Australia shall withdraw its Annex 15-A, Section 5 reservation regarding the procurement of such services.

4. A Party may require any producer of blood plasma products or supplier of blood fractionation services to fulfil requirements necessary for ensuring the safety, quality, and efficacy of such products. Such requirements shall not be prepared, adopted, or applied with a view to, or with the effect of, creating unnecessary obstacles to trade.

5. A Party may require that blood plasma products for use in its territory be derived from blood plasma collected in the territory of that Party.

6. Australia confirms that it will not apply any requirement for an applicant for approval of the marketing and distribution of a U.S. blood plasma product to demonstrate significant clinical advantage over Australian-produced products.

7. Article 21.2(c)* (Scope of Application) of the Agreement shall apply to paragraphs 1 through 6.

. . . this letter and your letter in reply . . . shall constitute an integral part of the Agreement.

* Article 21.2(c): a benefit the Party could reasonably have expected to accrue to it under Chapters Two (National Treatment and Market Access for Goods), Three (Agriculture), Five (Rules of Origin), Ten (Cross-Border Trade in Services), Fifteen (Government Procurement), or Seventeen (Intellectual Property Rights) is being nullified or impaired as a result of a measure that is not inconsistent with this Agreement.[5] ◆

Securing Australia's plasma fractionation supplies

The current system of a single fractionation plant could be made more robust. At present, there may be delays caused by equipment breakdown, or the Australian plant could become a future terrorist target. Rather than primarily sourcing plasma fractionation services from overseas (the Australian Government's preferred option), the present system could be improved if instead an arrangement is made for a suitable and ready alternative source to be accessed only in the event of significant delays in local manufacture. Currently, CSL's overseas plants provide back-up, but the establishment of an additional, pre-approved offshore alternative source — for emergency use only in case of an ongoing supply problem — could lessen the impact (and perhaps the likelihood) of a terrorist attack at the CSL plant. Further, the presence of a viable alternative source may have the additional benefit of acting as a catalyst for greater efficiencies (in production rather than cost) at CSL, reducing the likelihood of manufacturing delays.

Future impact

The outcome of the Review of Australia's Plasma Fractionation Arrangements, as required by AUSFTA, could have major enduring consequences for the Australian health care system, its self-sufficiency in blood supply from low-risk donations, and its capacity to respond to natural and other disasters. Australia's

capacity for future self-sufficiency in fractionation would also be lost, while diminishing CSL's core business could prove a major setback to Australia's emerging biotechnology industry. The Australian public is entitled to ask why both major political parties agreed to include Australia's plasma fractionation in the trade deal with the US, given its public health significance. It is possible that industry lobbying may take advantage of the fact that dispute settlement is likely to favour trade facilitation over the protection of public health.[27] If the Review finds in favour of opening up Australia's fractionation arrangements to overseas tender, the states and territories should carefully consider whether such changes would be in Australia's national interest.

Competing interests

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Hilary Bambrick is related to Philip Flood, the Chair of the Plasma Fractionation Review. To the best of her knowledge, this article was underway before he was approached to take this position, and he has had no input into the content of the article. The authors have made a formal written submission to the Review of Australia's Plasma Fractionation Arrangements committee.

Author details

Hilary J Bambrick, BSc, BA(Hons), PhD, Research Fellow[1]
Thomas A Faunce, LLB(Hons), BMed, PhD, Senior Lecturer, Medical School and College of Law[1] and Director[2]
Kellie Johnston, BSc(Hons), LLB(Hons), Research Associate[2]

1 National Centre for Epidemiology and Population Health, The Australian National University, Canberra, ACT.
2 Globalisation and Health Project, Centre for Governance of Knowledge and Development, The Australian National University, Canberra, ACT.

Correspondence: hilary.bambrick@anu.edu.au

References

1 National Blood Authority. AHMC Policy Statement on National Self-Sufficiency in the Supply of Blood and Blood Products. 27 June 2006. http://www.nba.gov.au/articles/article_20060419_01.htm (accessed Jul 2006).
2 Commonwealth of Australia. National Blood Authority Annual Report 2004-05; Canberra, 2005. http://www.nba.gov.au/pubs.htm (accessed Jul 2006).
3 Australian Red Cross Blood Service. Your guide to giving blood. http://www.donateblood.com.au/Donor/guide/faq.asp#13 (accessed Jul 2006).
4 Australian Government Department of Foreign Affairs and Trade. Australia-United State Free Trade Agreement (AUSFTA). http://www.dfat.gov.au/trade/negotiations/us.html (accessed Feb 2006).
5 Australian Government Department of Foreign Affairs and Trade. Australia-United States Free Trade Agreement. Chapter Twenty-one – Institutional Arrangements and Dispute Settlement. Section B: Dispute Settlement Proceedings. Article 21.2(c). http://www.dfat.gov.au/trade/negotiations/us_fta/final-text/chapter_21.html (accessed Feb 2006).
6 Australian Government Department of Foreign Affairs and Trade. Australia-United States Free Trade Agreement. Chapter Fifteen – Government Procurement. Article 15.2: General principles. National treatment and non-discrimination. http://www.dfat.gov.au/trade/negotiations/us_fta/final-text/chapter_15.html (accessed Feb 2006).
7 Australian Government Department of Foreign Affairs and Trade. Australia-United States Free Trade Agreement. Annex 15-A Section 5: Services. Schedule of Australia. http://www.dfat.gov.au/trade/negotiations/us_fta/final-text/chapter_15.html (accessed Feb 2006).
8 Vaile M. Side letter from Australian Trade Minister Mark Vaile to United States Trade Representative Robert B Zoellick. 18 May 2004.
9 Australian Government Department of Health and Ageing. Review of Australia's plasma fractionation arrangements. 2006. http://www.health.gov.au/internet/wcms/publishing.nsf/Content/plasma-fractionation-review.htm (accessed Feb 2006).
10 Australian Government Department of Health and Ageing. Plasma fractionation review committee appointed. 2006. http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-mediarel-yr2006-ta-abb015.htm (accessed Jun 2006).
11 Volkow P, Del Rio C. Paid donation and plasma trade: unrecognized forces that drive the AIDS epidemic in developing countries. *Int J STD AIDS* 2005; 16: 5-8.
12 National Plasma Centers. http://www.nationalplasmacenters.com/ (accessed Feb 2006).
13 International BioResources, L.L.C. Earn money and save lives. http://www.internationalbioresources.com/Donor.cfm (accessed Feb 2006).
14 van der Poel CL, Seifried E, Schaasberg WP. Paying for blood donations: still a risk? *Vox Sang* 2002; 83: 285-293.
15 Schreiber GB, Busch MP, Kleinman SH, Korelitz JJ. The risk of transfusion-transmitted viral infections. *N Engl J Med* 1996; 334: 1685-1690.
16 Volkow P, Lopez-Vidal Y, Amieba RI, Hernandez M. Paid plasma donation and risk of blood-borne diseases in blood-product recipients. *Lancet* 2001; 358: 2001-2002.
17 Sabino EC, Goncalez TT, Salles NA, et al. Trends in the prevalence of Chagas' disease among first-time blood donors in Sao Paulo, Brazil. *Transfusion* 2003; 43: 853-856.
18 AuBuchon JP, Birkmeyer JD, Busch MP. Safety of the blood supply in the United States: opportunities and controversies. *Ann Intern Med* 1997; 127: 904-909.
19 American Red Cross. Give blood! Frequently asked questions. http://www.pleasegiveblood.org/donating/faq.php (accessed Jun 2006).
20 Jones RP, Prasad V, Kuruvatti J, et al. Remuneration for blood donation and attitudes towards blood donation and receipt in Leeds. *Transfus Med* 2003; 13: 131-140.
21 Davis M. Deal may hurt CSL revenues. *Australian Financial Review* 2004; 1 Dec 2004; Sect. 15.
22 Australian Government Department of Foreign Affairs and Trade. Australia-United States Free Trade Agreement. Guide to the Agreement. March 2004. http://www.dfat.gov.au/trade/negotiations/us_fta/guide/15.html (accessed Feb 2006).
23 World Trade Organization. Council for Trade-Related Aspects of Intellectual Property Rights — Scope and modalities of non-violation complaints under the TRIPS Agreement. Communication from the United States. World Trade Organization Document IP/C/W/194, 2000.
24 World Trade Organization. Japan — Measures Affecting Consumer Photographic Film and Paper. World Trade Organization Document WT/DS44/R [10.37] (Report of the Panel), 1998.
25 World Trade Organization. European Communities — Measures Affecting Asbestos and Asbestos-Containing Products. World Trade Organization Document WT/DS135/AB/R[190] (Report of the Appellate Body), 2001.
26 Vienna Convention on the Law of Treaties. http://www.worldtradelaw.net/misc/viennaconvention.pdf (accessed Jul 2006).
27 Greenswald J. WTO dispute settlement: an exercise in trade law legislation? *J Int Econ Law* 2003; 6: 113-124.

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