Sanquin
Blood Supply

Annual Report 2012

Blood and Beyond

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From the Chairman

Downsizing and growth. In 2012, these two seemingly contradictory developments played a major role in our organisation. On the one hand, there was the reorganisation in the Blood Bank division, forcing us to say farewell to a number of colleagues. On the other hand, the Plasma Division grew significantly. Yet the developments can be linked in a logical fashion; both were born out of our efforts to ensure the best possible supply of blood and plasma products.

Sanquin Blood Supply is an organisation rooted in Dutch society. This is reflected in the hundreds of thousands of selfless donors who voluntarily gave blood in 2012. Our participation in the Serious Request fundraising effort by radio station 3FM also clearly illustrates our strong social commitment. Sanquin employees collected • 60,000 for this fundraising effort, destined for the Red Cross.

Cost-effectiveness

In addition to quality and service, the health care sector - and thus the blood bank - is also expected to focus strongly on cost-effectiveness. Sanquin will cut costs by at least 6% (•11.6 million) by 2015. We will achieve this by making changes to the organisation: from increasing centralisation of support staff and further tailoring of operational functions to decreasing demand for blood and blood products, screening and adjusting product lines (after consultation with hospitals), and evaluating current test panels for diagnostic screening (in consultation with external specialists). Maximum patient safety remains the key principle in addition to the aspects outlined above.

Global entrepreneurship

In order to remain efficient and competitive in the field of plasma products, it is necessary to operate at the international level, with the corresponding increase in volumes. Significant scale increases have been made possible by the contract signed with the US pharmaceutical company Baxter in 2012; we will be processing US plasma for the US and other markets.

Innovation

Research and innovation are of vital importance to finding clinical solutions for unsolved medical problems. Our researchers, often in close cooperation with Dutch and international scientific institutes, made a significant contribution to the field this year, with 12 dissertations, 175 papers in peer reviewed journals.
I was also proud to officially open the Laboratory for Cell Therapy in November 2012. In addition to processing stem cells, this state of the art laboratory offers innovative cell therapy products. With five clean rooms and a staff of specialists, the laboratory can cooperate extensively with other centres and thus operate productively and efficiently.

A changing world

In 2012, our response to the changing world was innovation and global entrepreneurship, with unflagging, intense attention for our social mandate. Our attention to donors, patients and other stakeholders, and their satisfaction with our quality, service, price and added value, will determine our future.

Aart van Os,
Chairman Executive Board

Theo Buunen's departure

We said farewell to my predecessor last year. Theo Buunen went into early retirement in September. Thanks in no small part to how he performed his work, I found myself heading a modern, successful and financially healthy organisation when I was appointed. Our blood supply gained solid foundations and grew safer under his leadership. We are grateful for his efforts.

Executive Board Report

Membership

In 2012, the members of the Executive Board were:

- T.J.F. Buunen, PhD (Chairman until 1 September 2012)
- A. van Os (Chairman from 1 September 2012)
- H.J.C. de Wit DPharm (Vice Chairman)
- Prof R.A.W. van Lier,MD PhD (Member)
- H.M.H. de Bruijn-van Beek, LLM (Executive secretary)

After working for Sanquin Blood Supply and its legal predecessors for 28 years, Mr T.J.F. Buunen went into early retirement. As of 1 September 2012 the Supervisory Board appointed Mr A. van Os as Chairman of the Executive Board.

Mission

The Blood Supply Act aims to safeguard the quality, safety and availability of blood and blood products in The Netherlands. Sanquin supports this goal:

The Foundation works on a not-for-profit basis to secure blood supply and to promote transfusion medicine in such a way as to meet the most stringent quality, safety and efficiency requirements. It provides products and services, conducts scientific research and offers education, training and continuing education.

Thanks to the input and dedication of hundreds of thousands of Dutch blood donors, we are able to execute our mission.

In addition to the annual accounts as required by law, Sanquin also consolidated the financial results of CAF-cvba in Brussels and Sanquin Oy in Helsinki in this annual report. CAF is the Belgian plasma fractioning institution, which Sanquin has owned 50.01% of since 2008. The remaining 49.99% is owned by the Belgian Red Cross and the French LFB.
Sanquin Oy is a small Finnish subsidiary that handles contacts with Finnish clients.

Meetings

The Executive Board held 51 meetings in 2012. Additional meetings take place as required. Members of the Sanquin Management Teams are invited to the meetings at the Board's request. All decisions are recorded in decision lists and minutes. The Executive Board adheres to the Sanquin Corporate Governance Code and the Governance Regulations, which contain rules and standards for good governance, effective oversight and clear accountability.

Current Events

The Executive Board extensively addressed the following subjects, which are of strategic importance for the future of the organisation.

Reorganisation Blood Bank division

The Minister of Health, Welfare and Sport imposed cutbacks on all actors in the care sector. The Minister also demanded the Blood Bank division operate on 6% less budget. This is in line with the 'Blood Bank 2015' efficiency programme that Sanquin had already initiated.

The price of blood products was a matter of media and political interest. The prices of blood products with limited shelf-life are higher in the Netherlands than in a number of other European countries. Quality criteria for the supply of blood products differ from country to country, as do the pricing and financing methods for blood products and the product range on offer. This makes it difficult to compare prices. In addition to the ongoing efficiency projects Sanquin conducts, it will also be investigating whether revising the product assortment and the number of safety checks will lead to adjustment of prices, without negatively affecting patient care.

International collaboration

Sanquin entered into a contract with Baxter, a US pharmaceutical company, in 2012. Sanquin will process Baxter's plasma for the preparation of clotting factors, albumin and immunoglobulins that are used for the treatment of, among other things, haemophilia, burns and diseases where the body's protection against infections or the body's own cells is disturbed. This step serves to strengthen Sanquin's solid foundations, and thereby those of the Dutch blood supply.

Expanding Cinryze manufacturing

The US Food and Drug Administration (FDA) gave permission for large-scale manufacture of the drug Cinryze in 2012. Sanquin has been manufacturing Cinryze on a smaller scale since 2010. In order to meet the demand for Cinryze, the decision was made to expand manufacturing capacity. The product is manufactured using US plasma in cooperation with Sanquin's US partner ViroPharma. This way, US patients with hereditary angio-oedema can be treated with a highly effective drug that has been available in the Netherlands for a long time already.

Participation in Xenikos

Sanquin Blood Supply has been participating in Xenikos since 19 June 2012. Xenikos BV is a biotech company involved in the development of an experimental drug, T-Guard®. T-Guard® is based on the effects of antibodies in combination with a toxin. The drug can 'reset' a patient's immune system by quickly and efficiently destroying unwanted T-cells. It can be used to combat life-threatening rejection after transplantation. It may also be effective in treating certain auto-immune diseases. The required experimental drug for the clinical studies will be manufactured by Sanquin Pharmaceutical Services (SPS) under pharmaceutical conditions.

External contacts

Ministry of Health, Welfare and Sport

Frequent consultation took place on both managerial and ministerial levels in 2012. Key topics for discussion included (in addition to Sanquin's budget and policy plan): the future of the cord blood bank, Sanquin's role in the blood supply on Bonaire, the results of the (follow-up) study requested by the Ministry of Health, Welfare and Sport into the cost-effectiveness of the public section of the organisation and the costs of plasma products by Sanquin, replacement of Quarantine Plasma for transfusion by SD plasma, the recommendations in the Electricity and Telecom capacity advisory report, elimination of Sanquin from the list of services approved for tender, collection of plasma for the theoretical demands in the Netherlands, and changes to the Blood Supply Act. Donor selection policy, particularly the exclusion as donors of men who have had sex with men, was a topic of discussion too. The minister asked Sanquin to give insight into the wish to be a donor, and the risk perception, among the MSM target group, and, in addition, to assess the effect of a revision. Sanquin initiated a study in response to this request.

Ministry of Defence

As in previous years, Sanquin maintained contacts with the Ministry of Defence with regard to the blood supply for the armed forces. One issue for discussion was cooperation in research and with Clinical Consulting Services. Additionally - together with the Ministry of Health, Welfare and Sport - the possibilities for supplying lyophilised plasma were discussed, a product not manufactured by Sanquin but that is imported from Germany.

European cooperation

Sanquin is represented in the European Blood Alliance (EBA) and the International Plasma Fractionation Association (IPFA). Sanquin employees are working together with European colleagues to update the Council of Europe's “Guide to the preparation, use and quality assurance of blood components”.

Patient Organisations

Sanquin maintains constructive contacts with a large number of patient organisations. This includes the following organisations:

National:

- Stichting AfweerStoornissen
- Nederlandse Vereniging van Hemofilie Patiënten
- Vereniging Spierziekten Nederland
- Patiënten vereniging voor Hereditair Angio Oedeem en Quincke’s Oedeem
- ITP (Idiotypische Trombocytopenische Purpera) Patiëntenvereniging Nederland
- Stichting Zeldzame Bloedziekten
- Stichting StiKa (Ziekte van Kawasaki)
- Nederlands Patiënten Consumenten Federatie
- OSCAR (Organisation for Sickle Cell Anemia Relief)
- Stichting AA & PNH Contactgroep (Aplastische Anemie en Paroxismale nachtelijke hemoglobinurie)
- Stichting Contactgroep Leukemie

International:

- Patient Association for Hereditary AngioEdema International
- European Haemophilia Consortium
- US HAE Association (HAEA)
- Thalassaemia International Federation

Blood product users

User councils operate at the regional level, with representatives from hospitals and Sanquin in attendance. Representatives from hospitals are also members of the National Users Council (LGR), which advised the Executive Board on logistics and service provision in 2012, as it has in the past. The key topic of discussion in the LGR was Sanquin's plan to restructure the Blood Bank. The LGR outlined a number of requirements for implementing Sanquin's plan to reduce the number of distribution centres and change the location of a number of them. The LGR also discussed the introduction of SD plasma as an alternative for quarantine plasma for transfusion; the results of customer satisfaction surveys and the frequency thereof; changes to the patient information brochure and the issue of blood group-specific platelets. The LGR also requested updates on the state of affairs regarding full donor typing.

Sanquin is represented in both the Netherlands Association of Haemophilia Treatment Professionals and the Interuniversity Working Group for the Treatment of Immune Deficiencies.

The Executive Board looks back on the reporting year with satisfaction, and looks to Sanquin's future with confidence.

Amsterdam, June 2013
Executive Board

Overview of other positions held by board members

Board of Directors

T.J.F. Buunen, PhD (1949)
Main position: Chairman of the Executive Board, Sanquin, until 1 September 2012
Stated information applied until the member stepped down as chairman of the EB

Other positions:
- Treasurer, Medisch Centrum Slotervaart Foundation
- Chairman of the Board, CAF, Brussels (consolidated in Sanquin annual account)
- Board member, International Plasmafractionation Association
- Delegated Commissioner, Euroclone b.v., Amsterdam (consolidated in Sanquin annual account)
- Director, Landsteiner Foundation for Blood Transfusion Research
- Treasurer, Joghem van Loghem Foundation
- Chairman of the Supervisory Board, Population Screening Midden-West

A. van Os (1955)
Main position: Chairman of the Executive Board, Sanquin, from 1 September 2012

Other positions:
- Member of the Advisory Board, Zegel Gezond

H.J.C. de Wit DPharm (1953)
Main position: Vice-chairman of the Executive Board, Sanquin

Other positions:
- Chairman of the Executive Board, European Blood Alliance
- Board member, Committee of Experts on Blood Transfusion of the EDQM (European Directorate on the Quality of Medicines) of the Council of Europe
- Board member, IDTM foundation
- Board member, Tekke Huizinga Fund Foundation
- Member of the Board of Directors, American Blood Centers
- Member of the communication platform for medical advisors at Fresenius
- EMEA customer panel member at Caridian BCT
- Member of the Advisory Board, TRIP

Prof R. van Lier, MD, PhD (1956)
Main position: Member of the Executive Board, Sanquin

Other positions:
- Professor of experimental immunology, AMC-UvA
- Board member, Immunovalley Foundation
- Chairman, Netherlands Immunology Society
- Council member, 'International Union of Immunological Societies'
- Secretary, scientific advisory council MS Research
- Member of the scientific advisory council, Netherlands Asthma Foundation
- Member of the scientific advisory council, Landsteiner Foundation for Blood Transfusion Research
- Chairman of scientific and medical advisory council, Immunobank NV
- Vice-president, EFIS (European Federation of Immunological Societies)

Membership of advisory councils, the complaints committee and consultative groups

On 31 December 2012, the following advisory councils and consultative groups were active:

National Donor Council

This body advises the Executive Board in issues of donor policy.
Membership: J.H.M. van Eijndhoven, PhD (Chairman), F.A.M. Kolman-Backbier, J.H.W.J. Peeters, H. Seijkens, H. van der Meij, R. Heemskerk, A.M. Hagen, S. H. Kruithof, and E.C.L.G. Zoetman-Hermans. Also present during meetings: J. Brouwer (Dutch Youth Committee), W.L.A.M. de Kort, MD, PhD, Sanquin Donor Affairs unit director and D.E. Loeff-Wolthuizen (executive secretary).

Ethics Advisory Council (EAC)

This body advises the Executive Board in issues of medical ethics.
Membership: Prof J.K.M. Gevers, PhD (Chairman), Prof E. Briët, MD, PhD, Prof C. Breederveld, PhD, Prof. G. Widdershoven, PhD, J. Over, PhD, T.A.S. Tomson, MD, A.J. Wilhelm, H.M.H. de Bruijn-van Beek, LLM (executive secretary). Prof C. Breederveld was appointed in mid 2012 to fill the position left by Hillen.

Medical Advisory Board (MAB)

This body advises the Executive Board regarding medical-pharmaceutical policy.
Membership: Prof R.A.W. van Lier, MD PhD (Chairman), P.A.W. te Boekhorst, MD PhD, C.P. Henny, PhD, J.H. Marcelis, MD PhD, J. Over, PhD, D. Overbosch, PhD, Prof D.J. van Rhenen, MD PhD, J.W.P.H. Soons, PhD, M. Tjoeng and E. Slot, MD (executive secretary).

Scientific Advisory Board (SAB)

This body advises the Executive Board on scientific and science and technology policy.
Membership: Prof R. van Lier, MD PhD (Chairman), Prof D.E. Grobbée, MD PhD, Prof P. Klenerman, MD PhD, Prof P.M. Lansdorp, MD PhD, Prof T. van der Poll, MD PhD, Prof P. Tiberghien, MD PhD, Prof R.R.P. de Vries, MD PhD, Prof A.F. Cohen, MD PhD and J.W. Smeenk (executive secretary).

National Complaint Committee

Donor complaints are handled at two levels: at the blood bank division level and at the corporate level. Donors who are not satisfied with the complaint handling in the division can turn to the National Complaint Committee. The National Complaint Committee handles these complaints and advises the Executive Board.

Membership: E.H. L.Vervuurt, PhD (Chairman), B. Kool, PhD, M. Brinksma, LLM, S.Kruithof, F.A.M. Kolman-Backbier, P.C. van Krimpen, PhD (advisor), H.M.H. de Bruijn-van Beek, LLM (executive secretary). Ms Kolman-Backbier acted as a replacement for Mr Kruithof, and was appointed as a committee member on 1 October.

In response to the concerns voiced by the National User Council regarding the joint position of executive secretary of the Executive Board secretary and of the Committee, M. de Bruijn handed over the secretariat of the Committee to W. Schueler, LLM per 1 April. When the latter was appointed to the secretariat of the Executive Board, her position was filled by M. de Bruijn, who stepped down from her position as secretary for the Executive Board on 1 January 2013 due to retirement.

National Users Council

This body advises the Executive Board on blood supply logistics and service provision. Membership: A. Castel, PhD, Chairman, F.J.M. van der Meer, PhD (NVHB), C.J. Pronk-Admiraal, PhD, Regional Users Council (RG Noord Holland), replacement is J.H. Klinkspoor, PhD, opening (NVHP), replacement is M. Degenaar, T. Bruin, PhD (RG IJssellanden), replacement is H.J.M. Salden, R.C.R.M. Vossen, PhD (NVKC/VHL), replacement is J. Slomp, PhD, L. van Pampus, MD PhD, replacement is J.W.J. van der Stappen, PhD (RG Geldersche Rivieren), N. Dors, PhD (NVK), F. Hudig, PhD (RG Leiden Haaglanden), replacement is G.A.E. Ponjee, PhD, A.W.M.M. Koopman-van Gemert, MD PhD (NVA), K.M.K. de Vooght, PhD (RG Midden Nederland), replacement is C.M. Hackeng, PhD, A.B. Mulder, PhD (RG Noord Nederland), replacement is H de Wit, PhD, (NVZ) opening, M.R. de Groot, PhD (NVvH), replacement is J.Th.M. de Wolf, MD PhD, M. van Hulst, PhD (NVZA), replacement is P.D. Knoester, PhD, J.W.P.H. Soons, PhD, (de Meierij), replacement is J.L.P. van Duijnhoven, PhD, P.A.W. te Boekhorst, PhD (RG ZWN Rijnmond/ West Brabant/Zeeland) replacement is H. Russcher, PhD, M.P.G. Leers, PhD (RG Limburg), replacement: Y.M.C. Henskens, PhD, A. Leyte, PhD (WG Techniek en Logistiek), Prof D.R. van Rhenen, MD PhD and M. van Kraaij, MD PhD (Blood Bank division representatives), replacement is J.P. Jansen van Galen, M. de Haas, MD PhD (Sanquin Plasma Products, Research, Diagnostics), replacement is J.J. Zwaginga, MD, PhD, A. van Os (Executive Board Chairman-Sanquin), H.J.C. de Wit DPharm (EB-Sanquin), Prof R.A.W. van Lier, MD PhD (EB-Sanquin), M. de Bruijn-van Beek LMM (executive secretary, Sanquin Corporate staff)

Animal Experimentation Committee

This committee is responsible for the ethical evaluation of all of the animal experiments that Sanquin carries out, in compliance with the Experiments on Animals Act. Committee membership is in compliance with this law.
This Committee advises Sanquin's mandated licensee with regard to the permissibility of planned animal testing.

Report from the Supervisory Board

Membership

In 2012, the Supervisory Board consisted of:

- J.H. Schraven, LLM (Chairman)
- Prof F.C. Breedveld, MD PhD
- Prof B. Löwenberg, MD PhD
- M. van Rijn (until June 2012)
- K. Bergstein (from September 2012)
- H.M.H. de Bruijn-van Beek, LLM (Secretary)

The statutory retirement of Board Member Schönfeld in 2011 created an opening on the Board that was only filled in September 2012. Mr Schönfeld was willing to stay on temporarily as an advisor to the Supervisory Board until that time. As of 1 September, K. Bergstein was appointed to the Supervisory Board.

Report

The Board supervises the Executive Board's policies and the general course of affairs at Sanquin. The Supervisory Board also provides advice regarding Sanquin's strategy and activities and makes decisions about important proposals submitted by the Executive Board. In this annual report, the Board gives an account of its activities during 2012. The Sanquin Corporate Governance Code, adopted by the Board, contains rules and codes of conduct for good governance, effective supervision and clear accountability. The Board met four times in 2012. In addition, the members of the Supervisory Board maintained individual contact with Sanquin managers and employees. One of the members of the Supervisory Board discussed the draft for the 2011 annual report with the external accountant, the corporate controller and the chairman of the Executive Board.

The Supervisory Board approved the policy plan, 2013 budget and Mid-term Plan. Financial reports, the 2011 annual report and annual account, and the accountant's report were discussed while the accountant was present. As is customary, the Supervisory Board also discussed the risk inventory drafted by the Executive Board and the corresponding management measures.

All but one of the investments proposed by the Executive Boards were approved. The Supervisory Board had a number of questions regarding investments in one of the Plasma Products buildings.

After being formulated during the plenary meetings, the Supervisory Board approved a contract with Baxter for the preparation of intermediate and final products using Baxter raw materials (plasma and other intermediate products) in a written procedure. Baxter has issued a loan that allows investments to enable Baxter to perform contracted manufacturing for 10 years.

The Supervisory Board also approved Sanquin's collateral provision for a loan from Agentschap NL to the Dutch Biotech start-up Xenikos, which is developing a drug against Graft-versus-Host Disease. The Supervisory Board had agreed to Sanquin's participation in this start-up in 2011.

The Supervisory Board took note of the Minister of Health, Welfare and Sport's position on the study by ConQuaestor, commissioned by the ministry in 2010. The study investigated the long-term sustainability of the supply of plasma products by Sanquin and the pricing structure for deliveries between Sanquin's public and private sections. In her letter to Parliament, the Minister

indicated she would ask Sanquin to implement measures to ensure the blood bank's equity capital does not bear the risk for the company's private activities, and vice-versa. The Supervisory Board discussed an initial exploration of the options to achieve this with the Executive Board.

The Supervisory Board requested updates on the progress of the reorganisation within the Blood Bank division. Agreement was reached with the unions regarding a redundancy package in the spring. The Works Council issued a positive recommendation regarding the reorganisation plan, with a number of conditions. The Board also requested updates on Sanquin research strategy and ambitions regarding tissues (including cord blood) and addressed Sanquin’s approach to external and internal communication. The Supervisory Board took note of the measures Sanquin has taken to ensure the quality of the blood supply.

The Supervisory Board places great value on the voluntary and selfless nature of blood donations in the Netherlands, and believes that donors have a right to expect good, friendly service from Sanquin.

On 26 April, the chairman of the Supervisory Board discussed with the Works Council the general course of affairs within the organisation.

On the selection committee's recommendation, the Supervisory Board decided to appoint Mr A. van Os as chairman of the Supervisory Board on 1 September, replacing Mr T.J.F. Buunen, who retired and stepped down on that date. On 27 September, the organisation said farewell to Mr Buunen, whose major efforts for Sanquin and its predecessors over the past 27 years will long be remembered.

With the ministry of Health, Welfare and Sport, the Supervisory Board discussed remuneration for Executive Board members, which will comply with planned legislation (the Earnings Standards for (Semi)public Organisations act (Wet normering Topinkomens (semi)publieke organisaties)) that came into effect on 1 January 2013.

As shown in the overviews elsewhere in this annual report, the Supervisory Board membership amply met the statutory expertise and experience requirements.

The Supervisory Board evaluated both its own operations as well as those of the Executive Board and established that its members are sufficiently independent. The decision-making procedure in the Supervisory Board is designed in such a way as to avoid any conflict of interest. The Supervisory Council appointed K. Bergstein in September 2012, filling the vacancy left by Schönfeld.

Quality, safety and availability of blood products in 2012 were made possible thanks to the strong involvement and efforts of donors. The Supervisory Board is deeply thankful to them and to all Sanquin employees for the way that they achieved Sanquin's goals together.

Amsterdam, June 2013
Supervisory Board

Overview of other positions held by board members

The overview below includes the most important other positions held by members of the Supervisory Board and the Executive Board of Sanquin Blood Supply. The other positions held by Executive Board members have been approved by the Supervisory Board.

Supervisory Board

J.H. Schraven, LLM (1942), Chairman from May 2006, appointed May 2006, stepping down June 2013, not eligible for reappointment.
Main position: • Supervisory Board Chair of Tata Steel Nederland B.V. and non-executive director of Tata Steel Limited (India)

Other positions:
- Board member, Carnegie Foundation
- Chairman of the Board, SEO Economisch Onderzoek
- Chairman, RAI Vereniging Advisory Council
- Chairman, Preferential KPN Stocks Foundation
- Chairman, Administration Office Foundation Unilever N.V.
- Chairman of the Board of Commissioners for Stork B.V. and Fokker Technologies B.V.
- Member of the Board of Commissioners for N.V. NUON Energy and BNP Paribas OBAM N.V.

ZM.J. van Rijn (1956), appointed May 2008, stepped down July 2012.
Stated information applied until the member stepped down from the Supervisory Board in July 2012
Main position: Chairman of the Executive Committee, PGGM

Other positions:
- Member of the Board of Commissioners, Rijnland Zorggroep
- Member of the Advisory Council for the Netherlands Care Authority (NZa)
- Chairman of the Board of Commissioners for Espria
- Member of the Board, Alzheimercentrum Support Foundation
- Chairman of the Board, De Groene Zaak

Prof B. Löwenberg, MD, PhD (1946), appointed May 2005, stepping down May 2013, not eligible for reappointment.
Main position: Professor of Haematology, Erasmus MC, Rotterdam

Other positions:
- Member of the Health Council of the Netherlands.
- Member of International Scientific Advisory Board, Lund Strategic Center for Stem Cell Biology and Cell Therapy, Lund University, Sweden
- Member of International Scientific Advisory Board, Department of Biomedicine, University of Basel
- Vice-chairman of the Board and Chairman of the International Science Committee, European School of Haematology, Paris
- Member of the Supervisory Board, Integraal Kankercentrum Nederland
- Editor, Blood, scientific journal of the American Society of Hematology

Prof F.C. Breedveld, MD, PhD (1950), appointed September 2010, stepping down September 2014, eligible for reappointment.
Main position: Chairman of the Board, Leiden University Medical Center

Other positions:
- Chairman, Curium Foundation
- Chairman, Leiden and surroundings Thrombosis Service Foundation
- Chairman, Medipark B.V. Stockholders Association
- Member of the Board, Leiden Bio Science Park Foundation
- Member of the management team, Leiden University Fund
- Member of the Board, Bontius Foundation
- Chairman of the Supervisory Board, Ipse de Bruggen Foundation
- Member of the Supervisory Board, VeerStichting

K.T.V. Bergstein, MBA (1967), appointed 1 September 2012, stepping down 1 September 2016, eligible for reappointment.
Main position: Member of the Executive Board, ASR the Netherlands, N.V.

Other positions:
- Member of the Board of Commissioners, 365 B.V.

Blood supply key figures

Key figures for the Dutch blood supply				
	2012	2011	2010	2009
Donor base				
Number of registered donors	**387,825**	398,379	406,127	404,184
Number of registered donors*	**379,846**	389,350	395,226	393,811
Donation frequency of whole blood donors per year	**1.52**	1.63	1.63	1.7
Donation frequency of plasmapheresis donors per year	**5.86**	5.88	5.53	5.34
Number of donors per 1,000 inhabitants	**22.62**	23.3	24.4	23.7
**** Excluding donors who are registered but who have not yet donated***				
Number of donations				
Total number of donations	**819,301**	885,836	883,346	906,767
Number of whole blood donations	**498,117**	538,282	542,160	575,050
Number of apheresis donations	**321,184**	347,554	341,186	331,717
Use				
Use of red blood cell concentrates	**506,671**	544,324	548,105	564,290
Number of platelets (from whole blood in donor units)	**285,643**	290,623	281,476	246,768
Number of units of fresh frozen plasma	**78,352**	89,631	81,742	90,390
Kilograms of plasma in total (including apheresis) supplied to Plasma Products division	**317,501**	347,044	348,369	342,995
Proportion of donors and supply of red blood cells				
Whole blood donors	**328,576**	329,283	333,439	331,738
Erythrocytes supplied	**506,671**	544,324	548,105	564,290
Percentage O negative in population, donors and red blood cells supplied				
	2012	2011	2010	
In population	**7.50%**	7.65%	7.65%	
Among donors	**11.64%**	11.53%	11.49%	
Red blood cells supplied	**13.23%**	13.48%	13.50%	
Whole blood logistics (all figures in donor units)	**2012**			
Whole blood donations	**498,117**			
Red blood cells to hospital	**506,671**			

Whole blood donations are separated into various components. Therefore, the figures concerning use may be higher than the number of donations.

Decreasing demand for red blood cells

In 2012, hospitals once again purchased fewer erythrocyte concentrates from Sanquin, a trend that has been observed for a few years. This is likely because many hospitals have taken an even closer look at blood product use following the updated Blood Transfusion guideline (2011). Sanquin Clinical Consulting Services have also been promoting effective blood use for some time - Clinical Consulting Services employees are transfusion doctors and transfusion specialists. They advise hospitals on proper blood use, limiting blood use to patients who really need it. Better implementation of transfusion thresholds and improved care chains resulted in lower red blood cell concentrate use. Sanquin has adjusted the number of donations in line with this trend and calls on donors only if necessary.

Whole blood donors per blood group in 2012				
	Total	In %	compared to 2011 (=100)	
O+	**119,999**	36.52%	120,816	99.3%
O-	**38,260**	11.64%	37,964	100.8%
A+	**104,717**	31.87%	105,149	99.6%
A-	**24,723**	7.52%	24,907	99.3%
B+	**23,776**	7.24%	23,216	102.4%
B-	**5,987**	1.82%	5,979	100.1%
AB+	**8,837**	2.69%	8,984	98.4%
AB-	**2,277**	0.69%	2,268	100.4%
	328,576	100.00%	329,283	99.8%

Unused full donations

Employees and processes at Sanquin are focused on treating each donation with the greatest possible care and attention, in order to keep the number of unused donations to an absolute minimum.

Whole blood	
Total number of donations	498,117
Rejected based on collection process	1,079
Rejected based on tests	1,781

Apheresis plasma for drug preparation	
Total number of donations	261,811
Rejected based on collection process	396
Rejected based on tests	363

Apheresis plasma for transfusion (Q-plasma)	
Total number of donations	54,650
Rejected based on collection process	329
Rejected based on tests	384

Thrombopheresis	
Total number of donations	4,723
Rejected based on collection process	38
Rejected based on tests	9
Total 2012	
Total number of donations	819,179
Rejected based on collection process	1,842 =0.22%
Rejected based on tests	2,537 =0.31%
Total unused whole donations	4,379 =0.53%

An unused whole donation is a donation that met requirements during collection, but subsequently went entirely unused for transfusion or other purposes. Donations that are not used at all were rejected for a donor-specific reason. Reasons include:

- Donations rejected during a check after collection for a reason other than abnormal volume (e.g. leaking seals);
- Donations for which the donor filed a report shortly after donation, resulting in rejection of the donation (e.g. flu the day after donation);
- Donations rejected due to repeated positive test results during quality control (particularly virological screening).

Recruiting new donors

Thanks to a donor base of hundreds of thousands of blood donors, the blood supply in the Netherlands is strong and solid. Every year, a proportion of donors stop giving blood, for example because they have reached the age limit for blood donation. The gap left by these departing donors is filled by new donors. Sanquin uses advertising campaigns throughout the Netherlands to recruit new donors. Recruitment was highly successful in 2012. Our goal was at least 37,240 new donors. By year's end, we had welcomed 37,252

Donors with positive results for infections

Syphilis	Donors New	New (per 100,000)	Donors Return	Return (per 100,000)
2012	8	21	7	2.3
2011	10	23	5	2
2010	11	24	4	1.1
2009	8	17	8	1.9
2008	11	39	8	2.2
2007	9	33	15	4
2006	13	41	10	2.5
2005	17	57	29	6.6

Hepatitis C	Donors New	New (per 100,000)	Donors Return	Return (per 100,000)
2012	4	11	0	0
2011	7	17.9	0	0
2010	6	13	0	0
2009	10	21	0	0
2008	4	14	0	0
2007	3	11	1	0.3
2006	5	16	5	1.2
2005	10	33	1	0.2
Hepatitis B	**Donors New**	**New (per 100,000)**	**Donors Return**	**Return (per 100,000)**
2012	13	35	6	2
2011	13	33	7	1.6
2010	18	40	2	0.6
2009	21	45	13	3.2
2008	16	56	4	1.1
2007	15	55	4	1.1
2006	21	66	5	1.2
2005	26	87	9	2.1
HIV-1/2	**Donors New**	**New (per 100,000)**	**Donors Return**	**Return (per 100,000)**
2012	0	0	2	0.67
2011	1	2.5	0	0
2010	0	0	1	0.3
2009	0	0	2	0.5
2008	3	10.5	0	0
2007	3	11	3	0.8
2006	1	3.1	4	1
2005	1	3.3	2	0.5
HTLV-I/II	**Donors New**	**New (per 100,000)**	**Donors Return**	**Return (per 100,000)**
2012	1	2.6	1	0.3
2011	3	7.7	0	0
2010	2	4	1	0.3
2009	2	4	0	0
2008	0	0	1	0.3
2007	0	0	1	0.3
2006	0	0	0	0
2005	1	3.3	0	0

Donors are tested for blood-borne infections at each donation. Donors with an infection are rejected for future donations. Naturally, the blood products of donors with an infection are destroyed. Infections are generally more common in new donors.

Social Annual Report

Workforce as of 31 Dec. 2012															
number of employees and number of FTE*															
		Permanent employ-ment				Temporary employ-ment				Total 1				Total 2	
		Full-time		Part-time		Full-time		Part-time		Full-time		Part-time			
		Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE	Number	FTE
2012	Men	***615***	***615.00***	***231***	***167.89***	***128***	***128.00***	***36***	***11.65***	***743***	***743.00***	***267***	***179.53***	***1,010***	***922.53***
2011	Men	653	657.45	186	117.18	115	115.12	51	16.42	768	772.57	237	133.60	1,005	906.17
2012	***Women***	***325***	***325.00***	***1,323***	***774.19***	***98***	***98.00***	***96***	***50.94***	***423***	***423.00***	***1,419***	***825.13***	***1,842***	***1,248.13***
2011	Women	350	350.79	1,356	777.97	97	97,11	139	63.19	447	447.90	1,495	841.16	1,942	1,289.06
2012	***Total***	***940***	***940.00***	***1,554***	***942.07***	***226***	***226.00***	***132***	***62.59***	***1,166***	***1,166.00***	***1,686***	***1,004.66***	***2,852***	***2,170.66***
2011	Total	1,003	1,008.24	1,542	895.15	212	212.23	190	79.61	1,215	1,220.47	1,732	974.76	2,947	2,195.23

* Excluding hiring and extra deployment of Sanquin's own employees

Six Sanquin employees received work disability benefits in 2012. Four Sanquin employees received partial work disability benefits (none in 2011).
3 former employees received a retainer in 2012, the same number as in 2011.

Years of service 2012				
number of employees				
	Men	Women	total	total
			2012	**2011**
< 1	185	149	**334**	408
2-3	127	186	**313**	366
4-5	100	163	**263**	190
6-9	118	262	**380**	480
10-14	167	391	**558**	520
15-19	93	202	**295**	296
20-24	79	202	**281**	288
25-29	58	143	**201**	179
30-34	57	99	**156**	164
35 or more	26	45	**71**	56
Total	**1,010**	**1,842**	**2,852**	**2,947**

The average Sanquin employee worked for the company for slightly longer in 2012 than in 2011: 12.6 years (2011: 12.0 years).

Departing employees in 2012		
	Number	**%***
Men	82	8.12
Women	164	8.90
Total	246	8.63

* of the total number of men/women/employees employed on 31-12-2012

The staff turnover rate dropped again slightly: from 9% in 2010 and 8.8% in 2011 to 8.6% in 2012. Considering the economic situation in the Netherlands, this development was not unexpected. The main reasons for leaving were termination of temporary contracts and jobs elsewhere. This was no different from reporting year 2011. The non-renewal of temporary employment contracts was used more actively as a measure to retain flexibility for potential redundancy as part of the Blood Bank 2015 reorganisation programme.

As was the case in previous years, Sanquin was generally successful in filling vacancies. Despite this, there was a significant increase in the number of job vacancies: 87 compared to 27 in 2011. This is related to the expansion of activities in the Plasma Products division (60 of the 87 job vacancies). Sanquin strives for efficient, cost-effective manufacture of drugs, among other things by exporting drugs under the Sanquin label or through contracted manufacturing. The expansion of these activities means a significant increase in the recruitment of sufficient (qualified) staff within the Plasma Products division was necessary in 2012 and will remain a continuing area for attention in the coming years. In order to streamline recruitment, a HR team has been formed that is focused exclusively on recruiting the required staff.

Staff turnover; those leaving service in 2012			
number of employees			
	2012	**%**	**2011**
career elsewhere	**68**	28	73
personal circumstances	**14**	6	21
working conditions	**1**	0	2
Unfitness	**1**	0	2
unauthorised absence	**0**	0	0
urgent reason	**1**	0	1
reorganisation	**4**	2	0
obu / flex / TOP / pension	**34**	14	37
termination of temporary employment	**85**	35	83
work disability	**5**	2	4
death	**4**	2	3
other*	**29**	12	33
Total	**246**	**100**	**259**

* including transfers within Sanquin and termination during probation.

Age demographics 2012				
number of employees				
	Men	Women	Total	Total
			2012	**2011**
0-24	23	27	**50**	70
25-34	190	260	**450**	523
35-44	267	457	**724**	753
45-54	321	629	**950**	971
55-59	132	295	**427**	413
60 and older	77	174	**251**	217
Total	**1,010**	**1,842**	**2,852**	**2,947**
Average age			**45.93**	**45.37**

The average age of Sanquin employees continues to rise. On average, women are a year older than in 2011 (2012: 46.6 years, 2011: 45.6 years), men are slightly younger (2012: 44.8 years, 2011: 44.9 years). Considering the vast majority of Sanquin employees are female, the average age has increased compared with 2011 (2012: 45.9 years, 2011: 45.4 years).

Absenteeism 2012					
Absenteeism percentages, including and excluding maternity/ parental leave					
	Men	Women		Total	
		Incl.	Excl.	Incl.	Excl.
2012	3.88	6.40	5.32	5.59	4.76
2011	3.74	5.57	4.85	4.96	4.48

The absenteeism rate (excluding maternity/parental leave) increased slightly from 4.7% in 2011 to 4.77% in 2012. As was the case in 2011, absenteeism in 2012 was lower than for the care sector as a whole (5.1%), but higher than in the hospital sector (4.33%).

Comparison (2012)	
	Total (excl.)
Health care sector	5.10
Hospitals	4.33

Duration of absence, including and excluding maternity/parental leave in 2012					
in days					
	Men	Women		Total	
		Incl.	Excl.	Incl.	Excl.
2012	14.63	19.83	17.64	18.99	16.64
2011	15.01	16.23	14.28	15.85	14.51

Frequency of absence, including and excluding maternity/parental leave					
number of reports					
	Men	Women		Total	
		Incl.	Excl.	Incl.	Excl.
2012	1.43	1.51	1.49	1.49	1.47
2011	1.53	2.35	2.34	2.02	2.01

Pay scale distribution 2012							
	young workers' pay scale		preliminary pay scale		graded pay scale		Total
	Men	Women	Men	Women	Men	Women	
5							0
10							0
15							0
20					2	17	19
25	1				48	44	93
30	1	2		1	72	190	266
35			1		112	679	792
40					133	151	284
45			2	7	145	241	395
50					96	147	243
55					94	69	163
60			1		113	115	229
65			1		37	29	67
70					27	12	39
75					15	13	28
80					11	2	13
other*					98	123	221
Total	2	2	5	8	1,003	1,832	2,852

* Concerns employees who receive a nominal salary; trainee research assistants and employees who are subject to a different salary scale system under the 'transitional regulations for the Collective Agreement of Sanquin 2001'.

Lower costs, same quality

2012 was a tumultuous year for the Blood Bank division. A great deal happened both at Sanquin and in the world around us. The first concrete consequences of the previously launched 'Blood Bank 2015' reorganisation were felt: we had to say goodbye to a number of colleagues. Additionally, the decision was made to reduce the number of distribution points from eleven in 2013 to seven by the end of 2014.

Independent consultancy ConQuaestor examined Sanquin's cost structure. The Minister of Health, Welfare and Sport responded to the report in July, prompting Sanquin to continue its critical examination of a number of business processes. While these changes were in progress, we continued to ensure that enough safe blood was available for everyone that needed it.

Blood Bank Efficiency Programme 2015

The Minister of Health, Welfare and Sport imposed cutbacks on all actors in the health care sector. Dutch hospitals saw their budgets reduced by 6%. The Minister also demanded that the Blood Bank division operate on 6% less budget. This represents an € 11.6 million decrease from 2015. This is in line with the 'Blood Bank 2015' efficiency programme that Sanquin had already initiated. The first consequences of these cutbacks were seen in 2012.

Blood Bank 2015: fewer distribution points

Following extensive discussion with the National Users Council, the Executive Board decided to reduce the number of distribution points from 11 to 7. These outlets supply hospitals throughout the Netherlands with blood products. This includes both planned restocking as well as emergency supplies. The plan to downsize to seven distribution points will result in over 2 million euros of cost savings, while maintaining the quality of our service provision. All hospitals (except two, as is already the case) can be reached within one hour, while hospitals that purchase a large number of special products can generally be offered a 30 minute delivery window. Logistics consultant Ortec advised us on the location and number of distribution points required to maintain the same high quality of service. Some hospitals were concerned that fewer distribution points would automatically mean less service. Pleun van Toledo, Distribution and Customer Service manager responds: "We take these concerns very seriously. We will perform a baseline measurement of delivery times for a number of reference hospitals in order to calculate the new delivery times. We hope this will address the hospitals' concerns."

Blood Bank 2015: redundancy plan and placement procedure for employees

Blood Bank 2015 has resulted in downsizing 120 to 130 full-time positions. A series of measures and the social consequences of the reorganisation were discussed in depth with the labour unions. These meetings resulted in an extensive, solid redundancy plan on 4 April 2012, which was approved by the Works Council. The placement procedure for employees whose former function was downsized commenced in June 2012. The number of job opportunities is growing, however, in another part of Sanquin, the Plasma Products division, thanks to the major growth it is experiencing. Interested employees have the opportunity to transfer from Blood Bank to Plasma Products.

Follow-up study by ConQuaestor into Sanquin cost structure

The minister of Health, Welfare and Sport responded to the report 'Sanquin cost accountability and the sustainability of the plasma product supply' by independent consultancy ConQuaestor on 10 July 2012. The minister supported the report's conclusion that the plasma supply is in good hands with Sanquin. She also emphasised the importance of efficiency. Sanquin endorses this. However, we have a few critical comments regarding some of the minister's statements. Read the minister's letter and Sanquin's response.

Product line under review

The Sanquin blood bank offers a broad spectrum of blood products. This includes products that are only occasionally required, as they may be of vital importance to vulnerable patients without notice. This also applies to the preparation of orphan drugs: medicines for rare diseases. This is one of the special facilities offered by Sanquin's private section. ConQuaestor has indicated that it may be possible to reduce the number of different products - and thus costs. The Sanquin Medical Advisory Board is currently examining whether a smaller product line is feasible without negatively affecting patient care. We are also examining whether we can reduce the number of tests by dispensing with those that no longer offer clear added value. Greater clarity on these issues is expected in 2013.

Meanwhile, the Blood Bank performed very well!

Despite the internal and external developments, Blood Bank services remained at the desired high level of quality. Thanks to the efforts of our employees and the hundreds of thousands of donors who gave blood, sufficient supplies of safe and healthy blood were available for everyone who needed it. Blood donor turnout was strong in 2012.

Sanquin is a hybrid organisation. The Blood Bank division is the public branch of Sanquin, and operates within the Blood Supply Act. The Minister of Health, Welfare and Sport approves the Blood Bank budget each year and determines the prices the Blood Bank may charge hospitals. In principle, the amount paid to the Blood Bank to supply blood products to hospitals in The Netherlands should cover the operating costs. Blood Bank finances should be kept separate from Sanquin's private activities.

Scaling up Plasma Products division safeguards continuity

In 2012, Sanquin signed a contract with Baxter, an American pharmaceutical company. With this step, Sanquin reinforces its solid foundations and those of the Dutch blood supply.

The contract states that Sanquin will process Baxter's plasma for the preparation of clotting factors, immunoglobulins and albumin destined for the US and other markets. These products are used to treat conditions including haemophilia, burns, and diseases in which protection against infections or the body's own cells is disrupted.

Contract with Baxter

Sanquin has significantly increased its manufacturing capacity with an eye to the future. This future has come rushing in thanks to the contract with US pharmaceutical company Baxter. In order to continue manufacturing in a cost-effective manner, Sanquin must target a larger market than the Netherlands alone. To illustrate the volume increase, 10 years ago, Sanquin processed about 200,000 litres of plasma per year. This figure was 300,000 for 2012. In a few more years, once Baxter manufacturing is up and running, that total - including both Dutch and international plasma - may increase to 2.2 million litres. Robert Tiebout, Plasma Products division director, comments: "This means, in cooperation with our partners, many products for many patients in countries all over the world. We have tackled the required scale increase so successfully that our manufacturing capacity for plasma products will soon be seven times greater than that required to serve the Dutch market." Of course, this increase also requires more staff: the division will have to add 200 full-time employees to meet all contractual obligations.

Expanding Cinryze manufacturing

In addition to the major contract with US company Baxter, Sanquin received Food and Drug Administration (FDA) approval for the manufacture of Cinryze™ on an industrial scale. Since 2008, Sanquin has been manufacturing the drug using US plasma provided by our US partner ViroPharma. The drug is intended for US patients suffering from Hereditary Angio-Edema (HAE).

Greater manufacturing capacity

Robert Tiebout: "The Dutch market is small. It is also a highly competitive, open market. Efficiency and quality are necessary to ensure the quality and cost-effective manufacture of our products. This means we need to create greater volumes; our goal is to process three to four million litres of plasma. We must also continue to invest in state-of-the-art equipment and new techniques in order to make our products even more effective and patient-friendly."

The expansion of manufacturing capacity resulted in a large new construction project at the Amsterdam site. Sustainable and energy-saving solutions were selected wherever possible for the new buildings. The buildings are heated and cooled using heat and cold storage and a heat pump. Lighting is controlled centrally using motion sensors. A CO2 system is in place for climate control, meaning the climate control system switches off automatically if windows are opened, and heat is captured from the ventilation system.

No donors, no blood supply

Sanquin Blood Supply cannot exist without the almost 400,000 selfless volunteer donors. We once again honoured the regular contributions from blood donors in 2012 on World Blood Donor Day. There was also additional attention for donors during the brainstorm session with the National Donor Council, the deployment of a new Mobile Donor Center (MDC), and the completion of part of the long-term study 'DonorInZicht' (DonorInSight).

World Blood Donor Day

Every year, 14 June is World Blood Donor Day. It is a day for honouring blood donors, who save thousands of lives every day by donating their blood. The theme for 2012 was 'Donors are heroes'. Why? After donating 35 times, blood donors can assume they deserve a reward, because they have saved at least one life. On the World Blood Donor Day, Sanquin Blood Supply honoured donors in a special way: their picture was taken and they received a goody bag with gifts. A documercial with nine-time Dutch figure skating champion Karen Venhuizen was aired on television all day. She also received drugs made out of plasma. In the short clip, she explains why donors are her real heroes.

Brainstorm session with National Donor Council

The National Donor Council exists for the donors, by the donors. Among other things, this council helps consider how Sanquin can best show its appreciation for blood donors. The council held a brainstorm session about this. On a national level, donors are all thanked the same way: with a bronze, silver or gold pin. The brainstorm session revealed that there is a need for a more personal form of thanks, taking regional differences into account. The greatest need among donors was personal attention and support during a donation.

New Mobile Donor Centre

Mobile Donor Centres (MDCs) are large, modern trailers that can be deployed anywhere and 'unpacked' to allow donors to give blood on site, with extended opening hours. We started with a small version. The success led to the deployment of larger MDCs throughout the country. Everyone is enthusiastic about these ready-to-use donor centres: Sanquin staff, donors, and passers-by alike. In 2012, we reached out to three quarters of the Netherlands with our MDCs.

DonorInZicht

The second part of the large-scale scientific study DonorInZicht was launched in 2012. Using scientific concepts from the field of psychology, this study provides insight into what motivates people to become blood donors and remain donors and how donors experience donation. Wim de Kort, Donor Affairs unit director, comments: "Response to this study is greater than in comparable studies: 60 to 70% of donors are participating. This goes to show how involved donors are! We are happy and proud of the turnout."

This is also Sanquin

Sanquin is known best for its blood bank activities. What many people are unaware of is that Sanquin also plays a role in other fields of health care. Below is a selection of the products and services we offered in 2012.

Midwives: blood test results back sooner

Sanquin performs a lot of blood tests on behalf of hospitals as well as midwives. Using an electronic system, hospitals have been able to submit and receive the results of blood tests digitally for years now. In 2012, a 'light' version of this system was made available to midwives. This allows them to process requests and results for blood tests digitally from now on. Midwives used to receive test results from Sanquin by mail. They then had to type these results into their own systems by hand; it was a cumbersome system. The new system not only makes processing results easier, it also reduces the risk of errors. The midwives are very positive about the new system, and Sanquin is pleased it could lighten their workload slightly, making it easier for them to care for their patients.

More internal cooperation between doctors and researchers

In 2012, cooperation between the Transfusion Medicine department of the Research division and the Clinical Consulting Service of the Blood Bank division took shape. Regional cooperation has existed for a number of years, but cooperation on a national level now allows both departments to utilise the knowledge, expertise and availability of transfusion doctors and specialists throughout the country. Thanks to the joint meetings and plans for scientific research currently being drafted, broader research projects into improving blood transfusion will become possible. This will benefit patients.

Research into more effective treatment for rheumatoid arthritis patients...

Therapeutic proteins, so-called 'biologicals', are increasingly being used for the treatment of, for instance, auto-immune diseases. However, these treatments are ineffective in 20 to 30 percent of patients.

In 2012, researcher Pauline van Schouwenburg was awarded a PhD for her research into immune response to a specific drug. An immune response is when the body creates antibodies against a foreign substance, such as a virus or bacteria. These antibodies take out the intruders. This is usually a good thing, as it kills off pathogens. However, some patients develop an immune response to the drugs. Their body views the drug as an intruder.

Van Schouwenburg studied the immune response to a drug for rheumatoid arthritis and other auto-immune diseases. Van Schouwenburg comments: "The studies showed that if a patient created few antibodies against the drug, it has no effect on the drug's effect. But if a patient makes a lot of antibodies, the drug is literally switched off and no longer works."

Using Van Schouwenburg's research, Sanquin hopes to learn more about the immune response patients can have to drugs. During the course of this research, Sanquin worked closely with Reade Rheumatoid Arthritis treatment centre. "There is a great deal of expertise regarding blood and immunology at Sanquin," says Van Schouwenburg. "Cooperation with Reade provided information from clinical practice. This was an ideal combination for my study. Ultimately, greater insight into immune response to drugs can lead to improved treatment for patients. Our department's research has already enabled the development of tests to measure the drug and antibody levels in a person's blood."

...where Sanquin also tests for the presence of the drug

Sanquin has developed tests that show whether there is enough of a biological in the blood and whether the body has created antibodies against it. The test results may lead to treatment adjustments, switching to a different biological, or permanently stopping the expensive therapy. Test requests are coming in from all over the world.

Not only hospitals ask for these tests; pharmaceutical companies are increasingly asking Sanquin to perform these tests for studies examining the effect of new biologicals. In 2012, we welcomed a new major client that wants to compare the effects of its new biological to that of a competitor. Some hospitals prefer to conduct the tests in their own laboratories. Since 2012, Sanquin has been offering these hospitals test kits they can use themselves. This allows the largest possible number of patients to benefit from Sanquin's expertise in this field.

A new laboratory for cell therapy

Sanquin opened the Laboratory for Cell Therapy on 1 November. In addition to processing stem cell preparations, the laboratory will also be offering cell therapy products. This is made possible by the new facility, including five clean rooms suitable for manufacturing cell therapy products. These products are considered drugs, and must therefore meet stringent quality requirements. Four of the five clean rooms will be used to manufacture cell therapy products, also called Advanced Therapy Medicinal Products (ATMPs). This is an entirely new field - there are currently no authorised products available in the Netherlands. Sanquin hopes to obtain the licence for the manufacture of ATMPs in early 2013. With five clean rooms, Sanquin is ready for it.
The manufacture of a number of ATMPs began in 2012. These were mesenchymal stroma cells for patients with Graft-versus-Host disease and tumour-infiltrating lymphocytes for the treatment of melanoma patients.

Tissue storage for hospitals

Since 2012, Sanquin has supported hospitals by cleaning and storing tissues on request. Occasionally, a section of skull must be surgically removed due to increased pressure on the brain, due to head trauma or after a stroke, for example. This bone section can only be replaced once the patient has recovered sufficiently. Until that time, the bone fragment must be stored safely. Sanquin was asked to take on this specialised task. We received 45 skull fragments in 2012. This number is expected to grow to an average of 200 skull fragments per year.

Sanquin employees: socially involved

In December 2012, Sanquin employees collected money for Serious Request 2012 - an annual fundraiser by radio station 3FM, with proceeds going to the Dutch Red Cross.

This year, proceeds went to the fight against infant mortality. Sanquin employees collected money in a number of different ways. For example, hundreds of employees worked an extra hour on 13 December 2012. Many also donated the value of their Christmas hamper to this charity. This raised a total of 60,000 euros. The cheque was handed to the DJs in the Glass House in Enschede on 21 December 2012.

International activities created jobs in Amsterdam

In 2012, Sanquin signed a contract with a large US pharmaceutical company. This 10-year contract is creating job opportunities at Sanquin; 200 additional full-time positions will be available in the coming years. Significant efforts were devoted to searching for new colleagues in 2012.

Printer plan

Sanquin began implementation of the printer plan in 2012. Departments no longer have their own printer; rather, one printer is shared between a number of departments. The default printer setting is also double-sided printing in black and white rather than colour. This saves paper and ink.

Customer satisfaction survey

Sanquin periodically conducts surveys amongst its clients - the hospitals - about their experiences with the Blood Bank and Diagnostics divisions. The key findings from the 2012 Sanquin Customer Satisfaction Survey are:

- Sanquin delivers high quality and service
- Sanquin is viewed as reliable and as a centre of expertise
- The overall grade given to Sanquin is 8.1 out of 10

This is a high score we can be proud of! The survey also found that customers are less happy about our price/quality ratio. This is an area we will focus on. Our next survey will be conducted in three years.

Drugs, tests and research... internationally

Sanquin Blood Products participates in many international activities and works together with international partners and research institutions. This allows us to build knowledge and experience.

Furthermore, operating on an international scale allows us to manage the costs of blood testing and blood products for our Dutch clients. A selection of our international activities in 2012 follows.

The search for a new drug

Since 19 June 2012, Sanquin Blood Supply has been participating in Xenikos BV. Xenikos is a biotech start-up developing an experimental drug called T-Guard®. T-Guard® is a drug for treating severe antibody reactions in patients who have received a transplant with blood stem cells from a donor: Graft-Versus-Host Disease (GVHD). In addition to Sanquin, two regional investment companies (PPM Oost/IIG Fonds) were also willing to invest in Xenikos. AgentschapNL, part of the Ministry of Economic Affairs, also provided an innovation loan. Sanquin also manufactures the experimental drug required for the clinical trials. Peter van Mourik, Quality & Regulatory Affairs director, was appointed co-chairman of Xenikos BV by the shareholders. He comments: "By participating in Xenikos, Sanquin is contributing to the development of a drug against a deadly disease in the transplant market; an interesting sector for Sanquin. This market is important for such divisions as Plasma Products (HepBQuin, a plasma product against Hepatitis B) and Research (research into the therapeutic efficacy of mesenchymal stem cells in GVHD)."

On stand-by with blood during the 2012 Olympic Games

The Blood Bank in the UK asked Sanquin to remain on stand-by during the 2012 Olympic Games. If large quantities of blood and blood products were to be required during the Games in London, for example due to a calamity, Sanquin would be there to aid the British.
This was a request we were happy to fulfil. In order to do so, we needed to guarantee that Dutch donor blood met the UK requirements for blood products. And of course, we needed to be able to provide enough blood in case of an emergency. Our donor base, available in case of emergency, guarantees our ability to do so. Rolf Buining and Guus Verhoeven (heads of Release and Customer Service) described all practical issues in an extensive emergency protocol: "Ranging from the transportation of our blood to the UK to connecting the two IT systems. The protocol was even tested once in broad strokes. That was a useful experience. In the end, our colleagues in the UK did not require our assistance. Which is a good thing, of course."

Anti-D tests for South Africa and the United States

Since 2012, Sanquin has offered manufacturers of anti-D immunoglobulin a test to check the anti-D content of the (intermediate) product. Sanquin previously only used this test internally. Upon request from the National Bioproducts Institute (NBI) in South Africa - a manufacturer of anti-D immunoglobulin - we examined whether we could offer this test as a service product. The Quality Control department of the Plasma Products division and the Diagnostics division worked together to make this possible. The result of this cooperation is that Sanquin is now one of the few organisations offering this test for anti-D quantification. The United States are now also using this test. "It is particularly satisfying to be able to help colleagues in South Africa and the United States by repackaging existing substances," says Nico Vreeswijk, Customer Relationship Management. Many other countries have since expressed interest in the anti-D test.

Large-scale study into cancer therapy

Sanquin is responsible for part of a large-scale study - the collection of certain white blood cells (monocytes) from the blood of patients with prostate cancer. Following collection, the same protein present on prostate cancer cells is placed on the monocytes. This is done in a special laboratory. The monocytes with the specific protein are then given back to the patient. The hope is that the patient's immune system will react to them. An immune response against the cancer cells is then also expected to develop. This can cause the body's own immune system to attack cancer cells. In 2012, Sanquin prepared for participation in this study. The first monocytes will be collected from a patient in early 2013.

Sharing knowledge: with everyone, for everyone

Sanquin is a centre of expertise in the field of blood, and has strong, long-lasting relationships with universities and other research institutes. A number of Sanquin researchers are also professors at the universities of Leiden, Utrecht, Rotterdam and Amsterdam.

We believe it is important to share our knowledge at the university level, as well as in a way that is accessible to everyone, for example via CORPUS in Leiden.

Sanquin researcher appointed as professor

Jan Voorberg was appointed professor at the University of Amsterdam on 7 November 2012, with a special chair in 'Cellular Hemostasis'. Voorberg: "This is a perfect opportunity to strengthen our contacts with the Academic Medical Center (AMC) of the University of Amsterdam in the field of Vascular Medicine." Voorberg's research group studies coagulation and thinning of blood. "Our study dovetails nicely with the clinical research at the AMC. Cooperation will allow us to benefit from each other's expertise and generate better research results. Jan Voorberg will combine the professorship with his current position as head of the Laboratory for Cellular Hemostasis within the Plasma Proteins department of Sanquin Blood Supply's Research division. "I consider my appointment as professor to be recognition for the work we do in our department. Furthermore, it will help us better position our research both nationally and internationally."

Workshops for caregivers

Why does the efficacy of drugs against rheumatoid arthritis and psoriasis eventually decrease in 20 to 30 percent of patients? Sanquin's research has led to significant expertise in this field, so 60 rheumatologists and dermatologists were given an answer to this question during Sanquin training sessions. Some patients develop antibodies against the drug they receive. The antibodies bind to the drug. The result: the drug no longer works, and the patient begins to feel worse again. At Sanquin, we can test whether a patient is creating antibodies against the drug, and whether there is enough of the active drug present in the patient's blood. During the training, we showed participants how we perform the tests, and how the results can help them treat their patients. If doctors suspect a patient is making antibodies against a drug, they can send in a blood sample for testing. The result indicates whether treatment needs to be adjusted. The patient can then switch to a different drug that he does not make antibodies against.

Participation in the Rembrandt Institute of Cardiovascular Science

Since 2012, Sanquin has been part of the Rembrandt Institute of Cardiovascular Science (RICS). The RICS is tasked with stimulating new, ground-breaking research. It is a joint venture between various Sanquin research departments, the Leiden University Medical Center (LUMC), both University Hospitals in Amsterdam (AMC and VU University Medical Center) and the Faculty of Science at the University of Amsterdam. The partners are working together closely on basic and applied scientific research into cardiovascular diseases. This includes a broad spectrum of diseases including vascular conditions, arrhythmias, kidney disease and clotting diseases.

Courses at the University of Amsterdam

For years, Sanquin has provided bachelor's and master's degree courses in immunology at the faculty of Science at the University of Amsterdam (UvA). The master's course is provided in cooperation with the Academic Medical Center (AMC).
Sanquin plays a major role in developing and providing the courses. For example, we developed a new course with a practical focus ('Immunology, research and clinic') for third-year Biomedical Sciences students in 2012. This course includes laboratory sessions during which students use advanced techniques also used by residents in training and researchers for immunological research. This shows students what immunological research entails. This better prepares them for the internships towards the end of their degree course.
As part of the courses provided by Sanquin, students also visited our labs for a day. Through presentations and tours of the research departments, they learned about the role Sanquin plays in the field of blood research. This exposes students to the fact that Sanquin is more than just a blood bank; it is in fact also a leading research institute where they can pursue a PhD after graduation.

Interactive exposition about blood in CORPUS

On 26 April 2012, Sanquin opened the exhibit 'The world of blood' at CORPUS in Oegstgeest. The voyage that visitors to CORPUS make through the human body now ends with 'The world of blood'. There, visitors learn about the history of blood, its composition, blood groups, blood transfusion and the blood bank's activities in an interactive manner.
Merlijn van Hasselt, Communications and Education staff at Sanquin explains: "We are pleased Sanquin can make a valuable contribution to the knowledge young people gain about blood. During the Blood Group Twister game, visitors learn about blood groups in a playful manner. The film and the quiz teach them about the function of blood. Participants in the blood quiz can even download at home the diploma they earned. It even has their photograph on it!"
The exhibition at CORPUS is an abridged version of the successful teaching package developed for pupils in the final year of primary school that Sanquin had developed previously: The world of blood & such.

Scientific results

2012 was a productive year in scientific terms. Twelve Sanquin researchers defended their theses. 175 articles were published in scientific journals, as well as several articles in professional journals and book chapters..
In addition to articles presenting fundamental research results and contributing to global knowledge of blood and immunology, other published articles included those describing the results of clinical studies that directly contribute to better treatment for patients, and articles on the effect of blood donations on iron levels in donor blood, which can make donations even safer and lead to fewer donor rejections due to low Hb levels.
Our scientific publications from 2007 were cited a total of 2350 times in the five years following publications, or an average of 18 citations per article.
Sanquin researchers have been successful in obtaining external research funding, with 42 % of research funds sourced externally.

Innovation and product and process development in cooperation with industry partners accounted for 20 % of Sanquin's research efforts in 2012, demonstrating that Sanquin's knowledge and expertise has broad and practical applications.

Report from the Donor Complaint Committee

General

An accessible system for lodging and processing complaints is of great social importance. Organisations' clients benefit from this by having their grievances or suggestions for improvement heard. And organisations themselves benefit because complaints can be considered signs for quality improvement. In the health care sector, this thought has been formalised in the Health Care Complaints Act (Wet klachtrecht cliënten zorginstellingen, WKCZ), which took effect on 1 August 1995. Although the blood bank does not fall within the scope of WKCZ, Sanquin has implemented a similar complaint procedure for donors of blood and/or plasma, adapted to the blood bank's organisational structure.

Principles of the complaint procedure

The complaint procedure for donors is based on the following principles:

- When possible, the complaint will be handled where it originated: with the blood bank;
- The complainants may be (potential) donors or their representatives or professionals with functional contacts with the blood bank;
- If the blood bank is not able to resolve the complaint to the complainant's satisfaction, then the complaint can be submitted to the National Complaint Committee;
- Both sides of the argument will be heard;
- The complainant will receive a written report on the handling of the complaint. Should the complainant desire it or the Committee deem it necessary, the complainant may be heard;
- If the Committee deems it necessary, it can advise the Sanquin Executive Board on further actions.

Practice

In principle, only complaints initially lodged with and handled by the blood bank will be considered for further processing by the National Complaint Committee. However, in certain cases, the National Complaint Committee also considers complaints at first instance in order to save donors time. This usually concerns complaints regarding general policy.
Whenever necessary, the expertise of Sanquin's medical secretary is called upon to provide further clarification of the guideline's content.

Membership of the National Complaint Committee

As of 31 December 2012, the complaint committee consisted of:

- E.H.L. Vervuurt, LLM, Chairman from June 2009, term ends January 2015, not eligible for reappointment;
- M. Brinksma, LLM, term ends June 2013, eligible for reappointment;
- G.A. Kool, PhD, term ends 1 January 2016, not eligible for reappointment;
- S. Kruithof, term ends 1 January 2016, eligible for reappointment;
- F.A.M. Kolman-Backbier, term ends 1 October 2016, eligible for reappointment;
- P.C. van Krimpen, PhD, added advisor;
- H.M.H. de Bruijn – van Beek, LLM, advisor and executive secretary until 1 April 2012;
- W. Schueler, LLM, advisor and executive secretary from 1 April 2012.

Upon request of the National Donor Council, F.A.M. Kolman-Backbier was initially appointed as a replacement member per 1 January 2012. Changes to the regulations made it possible to appoint a second member put forward by the National Donor Council.
As of 1 October 2012, the Executive Board appointed F.A.M. Kolman-Backbier as the second member put forward by the National Donor Council.

National Donor Complaint Committee activities

The Committee met once in 2012, on 15 March 2012. Sometimes the Chairman of the Committee and the secretary discussed the written handling of a complaint. A total of three complaints were submitted to the Committee.

Complaints

Executive Board salary and Sanquin transparency

The Committee is not involved in handling complaints regarding salaries, and decided not to address this part of the complaint. With regard to the complaint regarding Sanquin's transparency, the Committee notes that salaries have been reported in the annual reports for years, and that these are published on the website and available for review at the donor centres. The Committee concluded that it could not endorse the complaint regarding Sanquin's transparency. The donor also suggested that Sanquin pay donors. The Committee responded to the complainant's suggestion in writing, citing the law that states that donors may not be remunerated and that this clause is included primarily to safeguard the safety of the blood supply.

Complaint regarding closure of donor centre

A donor complained that there is no longer a donor centre present at the location he used to donate at, and that the reasons for closing this location were insufficiently motivated. The Committee considered that Sanquin, from a cost-effectiveness standpoint, may need to set a minimum number of donors donating at a certain location, and that Sanquin will take the number of donors that do not respond or are rejected into account in making these decisions. If Sanquin were only present twice rather than six times per year, the risk of donors not being able to donate for a year would be even greater. The Committee felt the new distance to the donor centre was not excessive for the donor in question. The Committee did not consider the complaint reason enough to recommend the Executive Board change its policies.

Complaint about stem cell donation process

A donor formally filed a complaint with the Committee. Before the Committee was able to address the complaint, the Sanquin department in question had already contacted the complainant in order to apologise and discuss how the process could be improved. Based on these discussions, the donor withdrew his complaint with the Committee.

Overview of complaints 2011 general

The Committee took note of the number and nature of complaints that were handled by the regional complaint coordinators in 2011.

State of affairs regarding complaints about Executive Board salaries

The Committee took note of the number of complaints regarding the Executive Board salaries in 2011 (1,387 for the entire reporting year).

Assessment of the donor travel expenses regulation

The Committee acquired information about the number of donors who make use of the travel expenses regulation.

Evaluation of the National Complaint Committee

The National Donor Council sent the secretary its evaluation of the National Complaint Committee. The latter spoke with a delegation from the National Donor Council about their proposals. Based on this discussion, a number of proposals for improvement were submitted to the Executive Board.

- In response to a comment that it is not an ideal situation to have the same person as secretary for both the Executive Board and the National Complaint Committee, the Executive Board decided to appoint a different secretary to the Committee per 1 April 2012.
- The comments on the regulations were implemented by the Executive Board. The regulations on regional and national handling of complaints were integrated into a single legal document; the key content-level changes are:
  - In order to expedite complaint handling, a number of terms were shortened;
  - The National Complaint Committee membership was expanded from four to five members, with two (instead of one) put forward by the National Donor Council;
  - The National Donor Council and regional donor councils now also receive a transcript of the Complaint Committee's annual report;
  - While the executive secretary may independently handle simple complaints, the complaint committee is informed in detail about the handling of every complaint.
- In response to a comment indicating that the organisation's annual report should give more attention to complaints handling, the Executive Board decided to include the Committee's annual report as an appendix to the general annual report. This was already realised in the 2011 annual report.
- In response to comments indicating that the Committee is not easy to find on the website, the website was updated to improve ease of finding.

The regulations, updated based on National Donor Council recommendations, were submitted to the Committee with a request for advice. The Committee endorsed the new regulations.

31 December 2012,

The Chairman The Secretary

H.M.H. de Bruijn–van Beek, LLM / W. Schueler, LLM