


**MINISTERIAL BRIEFING – PAUL WHEELHOUSE AND AILEEN CAMPBELL**

<i>Engagement Title</i>	Life Sciences Scotland (LSS)
<i>Timing</i>	<b>Normal</b>
<i>Organisation/Venue and full address including postcode</i>	Toshiba Medical Visualization Systems Europe, Ltd (TMVS), Bonnington Bond, 2 Anderson Place, Edinburgh, EH6 5NP
<i>Date and Time of Engagement</i>	Date(s): 14 March 2017 Time(s): 09.00 – 12.05  followed by a tour of TMVS 12.10 – 13.00
<i>Background/Purpose</i>	This is the first Life Sciences Scotland (LSS) industry leadership group meeting of 2017 and the first since the launch of the Life Sciences Strategy for Scotland 2025 Vision.  A tour of TMVS has been arranged for ministers directly following the LSS meeting. It will include an overview of TMVS whilst having a brief lunch before seeing a demonstration of their technology. This provides an opportunity to see how a life sciences company operates. Further info on TMVS at Annex H
<i>Relevance to Core Script</i>	Healthier and Wealthier & Fairer
<i>Greeting Party and specific meeting point on arrival (if event is at a non SE Building)</i>	Ministers will be met at the main door by [REDACTED] [REDACTED]
<i>Specific entrance for Ministerial Car/parking arrangements</i>	<input type="checkbox"/> None
<i>Event Programme</i>	Annex A
<i>Co-chair brief</i>	Annex B
<i>Speaking Points</i>	Annex C: Mr Wheelhouse Annex D: Ms Campbell
<i>Meeting Attendees</i>	Annex J

<i>Background</i>	Annex E: Life Sciences Strategy for Scotland Annex F: Background - Ms Campbell's speaking note Annex G: Scotland's life sciences business sector Annex H: TMVS Annex I: Key engagements
<i>Directions including map(s)</i>	Annex K:
<i>Media Handling</i>	None
<i>Official Support</i>	Official
	<b>Names:</b> 

**PROPOSED AGENDA**

**ANNEX A**

08.45 MORNING REFRESHMENTS

- 1     **09.00**       **Welcome, Adoption of Minutes**  
                  Dave Tudor
  
- 2     **09.10**       **Ministerial and Sector Update**  
                  Mr Wheelhouse  
                  Ms Campbell  
                  Julia Brown
  
- 3     **09.30**       **Strategy Update**
  - **LSS next steps** - Dave Tudor
  
- 4     **11.00**       **ILG Inputs**
  - **Skills update** – Ronnie Palin
  - **Manufacturing Strategy Update** – Dave Tudor
  - **Pharma Services Update** – Dave Scott
  
- 5     **11.45**       **Governance, Marketing and Communications**  
                  Marie Claire Parker
  
- 6     **12.00**       **AOB & Future Agenda Items**  
                  Dave Tudor

12.05 MEETING CLOSES

**Ministers will then be given a tour of TMVS, which includes an overview of the company over a brief lunch followed by a demonstration of their technology.**

**13.00           Ministers depart**

MINISTERIAL CHAIR BRIEF

ANNEX B

Agenda Item	Lead	Lead Minister	Summary of key points	Supporting info
Agenda Item 1 Welcome, adoption of minutes	Dave Tudor	n/a	<p>Dave Tudor, industry co-chair will welcome Ministers and all attendees to the meeting.</p> <p>This is the first full meeting since Dave Tudor took over as industry co-chair.</p> <p>To note that in January Dave wrote to the First Minister to confirm that he is leaving his current role as VP in Primary Supply in March to join GSK's Global Manufacturing Supply Executive in a new role as VP Strategy and Global Logistics. Dave's new role is not based in Scotland, however, he will continue to live in Scotland and he emphasizes in his letter that his new role will not affect his commitment to fulfil his role as industry chair of LSS and may even give greater insight into the future of the global life sciences sphere.</p> <p><u>Actions following the last LSS meeting on 7 November</u></p> <p>There were no specific actions for Scottish Government following the last meeting.</p> <p>A request was made to LSS members for interest in a ministerial visit to their companies to let secretariat know. A series of visits have now been co-ordinated and undertaken. A list of key Ministerial engagements is at Annex 1</p> <p>There are a number of papers attached separately for information only which are as a result of actions following the last meeting:</p> <ul style="list-style-type: none"> <li>• Health Innovation Partnership (HIP) overview and update</li> <li>• Brexit paper</li> <li>• Access to finance</li> </ul>	<p>Minutes of the last meeting attached separately</p> <p>Further info at Annex 1</p> <p>Papers attached separately - for info only</p>

<p><b>Agenda Item 2</b> <b>Ministerial and Sector Update</b></p>	<p><b><u>Summary of key points in Speaking Note.</u></b> Ministers will have the opportunity to say a few words to group members. You may wish to mention the following:</p> <p><b><u>Mr Wheelhouse</u></b></p> <ul style="list-style-type: none"> <li>• The launch of the Life Sciences Strategy for Scotland on 2 February</li> <li>• Acknowledge the work still to undertake to implement the delivery of the strategy.</li> <li>• Refer to the recent announcement that, as a result of restructuring, there are potential significant job losses at Johnson and Johnson’s sites at LifeScan (Inverness) and Ethicon (Livingston)</li> <li>• Confirm that Ministers, along with our enterprise agencies are working with J&amp;J to explore support available.</li> </ul> <p><b><u>Ms Campbell</u></b></p> <ul style="list-style-type: none"> <li>• Highlight the publication of the Health and Social Care Delivery Plan</li> <li>• Confirm that the plan is clear that the NHS will work collaboratively with external partners</li> <li>• Acknowledge that the Montgomery Review of access to medicines made 28 recommendations which have been accepted by SG</li> <li>• SG will work with relevant partners on taking the recommendations forward</li> <li>• Mention that the CMO’s report on Realising Realistic Medicines was published recently.</li> </ul>	<p>Speaking points at Annex C and D</p> <p>Background at Annex E</p> <p>Background at Annex F</p>
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<p><b>Agenda Item 3</b>  <b>Strategy Update</b>  <ul style="list-style-type: none"> <li>• LSS next steps</li> </ul></p>	<p>Dave Tudor</p>	<p>Dave Tudor will set out his plans for the structure and focus of future LSS meetings and also how LSS will implement and deliver the Life Sciences Strategy for Scotland.</p> <p>ILG members are being asked to agree on:</p> <ul style="list-style-type: none"> <li>• fully engaging with the delivery of the strategy, contribute, and recommend to others, to the implementation teams and support activities to grow the industry in Scotland.</li> <li>• the proposed changes to the format of the ILG meetings</li> <li>• fully supporting the proposed strategy delivery process</li> </ul> <p><u>LSS Objectives</u>  4 immediate objective for LSS have been identified which include the implementation of the strategy; agree how to monitor progress; align activities of key players behind the strategy; and promote LSS. An important part of this is stakeholder engagement with the life sciences community, including trade bodies and the NHS.</p> <p><u>LSS meetings</u>  Proposed changes to the LSS meetings include the format of the agenda, having 3 standing items and 1 variable item, and increasing the number of meetings a year to 4.</p> <p><u>Strategy Delivery</u>  2 ILG members will lead each of the 4 strategic themes identified in the strategy and work with the wider community to develop and deliver a set of 90 day action plans for the key priorities. Updates on these plans will be provided at LSS meetings.</p>	<p>3 papers attached separately for agenda item 3</p> <p>Paper attached separately</p> <p>Paper attached separately</p> <p>Paper attached separately</p>
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<p><b>Agenda Item 4</b></p> <p><b>ILG Inputs</b></p> <ul style="list-style-type: none"> <li>• <b>Skills Update</b></li> <li>• <b>Manufacturing Strategy Update</b></li> <li>• <b>Pharma Services Update</b></li> </ul>	<p>Dave Tudor</p>	<p><b>Lines to take:</b></p> <ul style="list-style-type: none"> <li>• Recognise that this is an industry led strategy and that Ministers greatly value that the strategy aligns across both Health and Economy agendas.</li> <li>• Interested to hear how buy-in from the wider community can be facilitated.</li> <li>• It is vital that Higher Education Institutes and the NHS are also involved in the delivery of the strategy as much as possible.</li> </ul>	
		<p><u>Skills update</u></p> <p>Ronnie Pain from Skills Development Scotland (SDS) will provide an update to members on the Life Sciences Skills Investment Plan (SIP). The SIP was launched in 2014 and it is recognised that the SIP needs to be refreshed to better reflect current challenges.</p> <p>ILG members are being asked to agree to endorse requirement for a revision of the Skills Investment Plan and to explore closer and joint working with the Chemical Sciences and industrial biotech skills groups.</p> <p><b>Lines to take:</b></p> <ul style="list-style-type: none"> <li>• We welcome a refresh of the Life Sciences SIP</li> <li>• Aware that as the industry grows, in accordance with the ambition of the strategy, the need for more highly skilled people will also increase.</li> <li>• Important that the SIP reflects future industry needs.</li> <li>• Particularly keen to understand how graduates can be helped into the industry</li> </ul> <p><u>Manufacturing Strategy Update (Dave Tudor)</u></p> <p>Dave Tudor will provide an update on the Life and Chemical Sciences Manufacturing Strategy and a progress on the 90 day plans.</p> <p>The first leadership programme commenced on 1 March and included a reception at parliament, attended by Mr Wheelhouse.</p>	<p>3 papers attached separately for agenda item 4</p> <p>Paper attached separately – for info only</p>

	<p>ILG members are being asked to consider where they might be able to support the master classes and the working groups.</p> <p><b>Lines to take:</b></p> <ul style="list-style-type: none"> <li>• Welcome the progress made on the manufacturing strategy.</li> <li>• Pleased to see the leadership programme has started and that the participants are benefiting from the knowledge and expertise of the industry.</li> </ul> <p><u>Pharma Services Updates (Dave Scott)</u>                  Dave Scott will provide an update on the Pharma Services (PS) Strategy. The PS steering group developed a PS Strategy to highlight the capability of this sub-sector; to encourage collaboration; and to raise the sub-sector's profile.</p> <p>The launch was put on hold due to the refresh of the LSS strategy and now the PS steering group will look to see how they can align their activities with the aims of the LSS strategy.</p> <p><b>Lines to take:</b></p> <ul style="list-style-type: none"> <li>• We recognise that pharma services is an important sector of the life sciences industry and has a significant contribution to make towards the ambition of the Life Sciences Strategy for Scotland.</li> <li>• Aware that Mr Ewing met with the PS steering group in March 2016 to hear more about the strategy.</li> </ul>			<p>Paper attached separately – for info only</p>
<p><b>Agenda Item 5</b> <b>Governance, Marketing and Comms</b></p>	<p>Marie Claire Parker</p>	<p>Marie Claire Parker will provide an update on new Governance Group and the Marketing, Communications and Engagement Group.</p> <p><u>Governance</u>                  Marie Claire will outline the new Governance Group and ask LSS to support the new structure, which has responsibility for LSS membership and for monitoring the performance of strategy implementation.</p>		<p>3 papers attached separately for agenda item 5</p>



			<p><u>Marketing and Comms Update</u></p> <p>SE has commissioned a company, the Union, to provide marketing and comms services to LSS. A detailed plan is being developed and LSS members are being asked to respond to the plan when it is produced as it will require their input.</p> <p><u>Key Performance Indicators (KPIs)</u></p> <p>A set of KPIs will be used to monitor progress across the industry to help with the delivery of the strategy and members are being asked to select the KPIs to be used for this purpose. The KPIs cover areas such as sector size (turnover, GVA, employment), business performance (from account managed companies), Innovation (BERD), Investment, Internationalisation and Inclusive Growth.</p> <p><b>Lines to take:</b></p> <ul style="list-style-type: none"> <li>• Ministers are willing to promote Scotland where they can and will look for opportunities to do this where possible.</li> <li>• Acknowledge that a set of robust statistics are required to measure performance to ensure the industry is on track to meet its vision.</li> <li>• Important to stay ahead of formal indicators</li> <li>• You may wish to reiterate your request to Dave Tudor to include workforce issues.</li> </ul>	<p>Papers attached separately</p>
<p><b>Agenda Item 6</b></p> <p><b>AOB</b></p>	<p>Dave Tudor</p>		<p>There are no items highlighted as AOB</p> <p>Ministers may wish to note that the ILG meetings in 2017 are scheduled for:</p> <ul style="list-style-type: none"> <li>• <b>13 June 2017</b> - due to be held at the Stratified Medicine Scotland Innovation Centre (SMS IC) at the Queen Elizabeth University Hospital (QEUH), Glasgow. The diary has been accommodated to allow for a tour following the meeting.</li> <li>• <b>7 November 2017</b> - due to be held at the Roslin Innovation Centre at Easter Bush and will include a tour of the facility, which is due to be opened summer 2017.</li> </ul>	

**SPEAKING NOTE – MR WHEELHOUSE**

**ANNEX C**

Good morning and thank you to you all for attending today's meeting

Of course, the biggest thing that has happened since we last met is the very successful launch of the strategy, which received a lot of good coverage in the media, particularly the BBC.

A lot of hard work went into the strategy from the people around this table along with other key stakeholders. It is going to take even more hard work to achieve the vision set out and Dave will go into detail about the implementation of the strategy and your role in that later.

But, as you will all know, Johnson and Johnson are undertaking a global restructuring of its business. As part of that restructuring there is a possibility of 80 job losses at Lifescan and 404 at Ethicon in Livingston.

The First Minister, Keith Brown and myself have been engaging with J&J, along with our enterprise agencies, to explore every possible support for the business especially at Ethicon.

That work has been detailed and intensive, looking at what we can do both to help address immediate business challenges, and to maximise the site's future potential.

Unfortunately despite our very best efforts, the company has decided to enter into consultation on possible site closure, which is hugely disappointing.

This does not reflect in any way on the Scottish life sciences community or as a place to invest.

As the Ethicon site in Livingston currently manufactures 5% of the overall global J&J suture market, it has been identified as a site where manufacturing can easily be absorbed by other sites within the group.

Much of the global life science sector are reviewing and streamlining operations. Rising R&D costs particularly is leading to the increased need for operational efficiencies. This is a stark reality and it is a global problem.

The work we will be taking forward under the key themes of the strategy will not make us immune to future challenges but it will make us a viable option for companies wishing to invest.

Just as importantly we need to build our own indigenous business base. I know that will be one of the key aims for the working groups and I look urge you to share your bright ideas on how we can creatively turn this negative into a positive.

In this context, it would be helpful to hear how we can engage more imaginatively and strategically with all business to anchor, build and attract.

I have been impressed by the enthusiasm and aspiration I encountered in everyone so far and your dedication to ensure the success of the industry is very commendable.

Ministers recognise the effort put in and we are very supportive of the industry ambition. Rest assured we will also do what we can to help the industry achieve its mission.

469 words

**SPEAKING NOTE - MISS CAMPBELL**

**ANNEX D**

Good Morning, I just want to mention a couple of key developments since the previous meeting:

The publication of the Health and Social Care Delivery Plan in December which set out our programme to further enhance health and social care services in Scotland between now and 2021.

That plan is primarily about re-focusing our efforts on prevention, anticipation and supported self-management; and, where treatment is needed, putting patients at the heart of their care packages with a real shift away from hospital-based care as the norm, and towards community or home-based care and support wherever possible.

The plan also recognises, though, that research and innovation are central to all high-performing health systems, leading to better targeted and more personalised treatment and improved patient outcomes. It is therefore very clear that research and innovation are not only core activities for our health and social care services in Scotland, but that science and discovery underpins the future development of those services.

I am particularly pleased that the Delivery Plan makes explicitly clear that the NHS in Scotland will work collaboratively with external partners, including the life science industries, to develop and appropriately commercialise innovative ideas and new technologies.

This is important, not only for improvements to service delivery and enhanced patient care, but also because it puts our NHS at the heart of economic growth. And it is absolutely right that, without detracting from the core values and purpose of the NHS, we should use the considerable public assets that rest in NHSScotland to support wealth creation in Scotland – this, of course, chimes well with the new life sciences strategy.

We have also had the report from the Montgomery Review of Access to New Medicines, which made 28 recommendations for future action all of which have been accepted in full by the Scottish Government.

We will be working with relevant parts of industry on how best to take those recommendations forward. Many of them are about data capture and use, particularly about the use of data for the assessment of new medicines, which might have wider relevance to the use of data for real world health technology assessment.

Andrew Morris, the Chief Scientist for Health, will be working with the Chief Pharmacist and others on those specific recommendations and on any read across to wider health technology assessment.

Finally, I would just mention the Chief Medical Officer's Annual Report - "Realising Realistic Medicine" – which was published a couple of weeks ago and sets out a broad framework for further consultation on putting the aims of realistic medicine into practice, across all health professions, and creating the right conditions to secure the linked aims of shared decision making and reducing harm, waste and variation across Scotland.

453 words

## LIFE SCIENCES STRATEGY FOR SCOTLAND 2015 VISION

## ANNEX E

The Life Sciences Strategy for Scotland 2025 Vision was published on 2 February 2017.

The Strategy's vision is to make Scotland the location of choice for the life sciences community and its mission is to increase the industry's contribution to the Scottish Economy to £8bn by 2025.

To achieve this, the strategy highlights four strategic themes as key to the Life Sciences Industry: Innovation and Commercialisation; Sustainable Production; Internationalisation; and Business Environment. Key priorities have been identified within each theme and LSS, in collaboration with the broader life sciences community, will develop and deliver action plans for each of the priorities.

### Key Priorities

#### Innovation and Commercialisation

- Drive growth through collaboration to commercialise the output of innovation and excellence centres
- Improve on the current ecosystem to maximise economic growth and create more companies of scale
- Attract, develop and retain entrepreneurial leadership across academia, the health service and industry

#### Sustainable Production

- Leadership confidence and promoting manufacturing
- Research commercialisation, technology development and scale up
- Supply chains and re-shoring
- Investing in Scotland

#### Internationalisation

- Leverage Scotland's networks
- Promote Life Sciences in Scotland
- Develop an international mindset

#### Business Environment

- Develop Scotland's Life Sciences infrastructure plan
- Maintain a world class regulatory environment
- Support the delivery of the Life Sciences Skills Investment Plan
- Improve access to funding and investment

### **Background**

Due to the change in economic circumstances, the Life Sciences Scotland (LSS) industry leadership group (ILG) is refreshing the Scottish Life Sciences Strategy *Creating Wealth Promoting Health*, which was published in 2011. Life Sciences is a key growth sector of the Scottish Economy and Mr Wheelhouse, MSP, chairs LSS along with the industry co-chair, Dave Tudor from GSK, with additional ministerial support from Aileen Campbell, MSP.

This is an industry led strategy, developed by the strategy refresh working group, which was formed by LSS and comprises of representatives of the various key subsectors of the Life Sciences industry, supported and facilitated by Scottish Enterprise. Scottish Government officials from the Life Sciences team have been involved in the process and have consulted with colleagues across SG who have a policy interest in Life Sciences to ensure it aligns across relevant Health and Economic portfolio areas.

Contact – [REDACTED] – March 2017



**MS CAMPBELL – SPEAKING NOTE BACKGROUND****ANNEX F****Health and Social Care Delivery plan December 2016**

A national delivery plan to up the pace of improvement and change within Scotland's health and care system has been published today. It sets out a series of key actions for government and local health and care services to deliver better patient care and better population health.

Key pieces of work already being taken forward are brought together in the plan including:

- investment in and the reform of GP services, primary care and social care services, including integration of health and social care;
- delivering more effective planning of NHS services; and
- intensifying efforts to improve public health and mental health services.

It is designed to help address the rising demand being faced by health and care services, and the changing needs of an ageing population. It fulfills the Scottish Government's commitment to publishing a delivery plan following the publication of Audit Scotland's report, *NHS in Scotland 2016*, in October. The plan will be supported by £128 million of change funding in 2017-18.

It sets clear activities and milestones that focus on four major programmes of activity:

- health and social care integration;
- the National Clinical Strategy;
- public health improvement; and
- NHS Board reform.

NHS boards have been asked to include their contributions to driving the work of this delivery plan in their Local Delivery Plans for 2017/18.

The plan includes this on research and development and innovation:

Research is central to all high-performing health systems, leading to better targeted and more personalised treatment and improved patient outcomes. Scotland has a solid track record as a health research nation and in winning competitively awarded research funds. Research and development (R&D) and innovation are core activities for our health and social care services in Scotland and development in health and social care will depend on the science and discovery that underpins it. Through NHS Research Scotland (NRS), there is already a firm foundation of collaborative R&D partnership working successfully across NHS Scotland, academia and life-science industries. We will continue to invest in NRS to support health-related R&D, building on its model to drive a renewed effort in health innovation, as well as in Scottish Health Innovations Ltd to encourage, develop and appropriately commercialise innovative ideas and new technologies arising from within the health services. By 2018, we will also:

- create governance structures to support a new, coherent and concerted effort on the promotion and exploitation of health-related innovation and new technologies for the benefit of the whole health service;
- develop regional innovation clusters to translate cutting-edge research and innovation into excellent individual health care; and
- support innovation and technology capacity-building at national, regional and local levels by facilitating, encouraging and empowering those who work in health and care to identify innovation challenges and develop partnerships to deliver solutions.

## The Montgomery Review of Access to New Medicines

Dr Brian Montgomery examined how changes made to the Scottish Medicines Consortium (SMC) process in 2014 affected access to medicines for rare and end-of-life conditions. The review's recommendations set out how the process for appraising medicines can be made more open, transparent and robust.

Following his recommendations, a revised approval process for true ultra-orphan medicines will be devised in the coming months. This will see final decisions on these low volume high cost medicines being made outwith the SMC.

The SMC will also be given an additional decision option to consider accepting a medicine on an interim basis so its clinical effectiveness can be further assessed. This means a new medicine that previously might have not been approved could potentially be accepted for use subject to on-going data collection and evaluation before a final assessment can be made.

The review's recommendations, which the Cabinet Secretary has accepted in full, are:

- Develop, agree and implement national datasets and data definitions for end-of-life, orphan and ultra-orphan medicines and IPTR/PACS (Individual Patient Treatment Requests/Peer Approved Clinical System) processes. This will ensure that data from Boards is consistent and can be collated. This in turn will allow Boards' data to be used to support functions such as planning and resource allocation.
- Develop, agree and implement a national chemotherapy dataset and equivalent datasets for medicines used to treat rare conditions.
- Develop, agree and implement sets of outcome measures for classes of medicines or, in the case of very rare conditions, specific medicines.
- Ensure that national systems being developed for electronic prescribing and electronic patient records are prioritised and support the above requirements.
- Establish a multi-agency taskforce or equivalent to report on data requirements to support the assessment and introduction of new medicines going forwards.
- Review the definitions for end-of-life, orphan and ultra-orphan medicines to ensure that the definitions used remain suitable to deal with the assessment of anticipated new treatments such as targeted medicines, increasing use of combination therapies and the impact of genomics.
- Develop, agree and implement a new definition of "true ultra-orphan medicine" to take account of low-volume, high-cost medicines for very rare conditions.
- Review communications of SMC's decisions to patients, patient groups and the pharmaceutical industry with a view to achieving greater transparency.
- Review and clarify the role of the SMC Public Partner.
- Consider key participants at PACE (Patient and Clinician Engagement) meetings being actively involved in the relevant parts of SMC meetings to enhance the quality of discussion and decision making.
- Develop and implement a new assessment and approval pathway for true ultra-orphan medicines that restricts the role of SMC to health technology assessment and places the responsibility for the final decision on availability elsewhere.
- Refine data collection systems to enable meaningful year-by-year comparisons and the monitoring of emergent trends.
- Review SMC's processes in relation to decision making by secret ballot.
- Minimise the inclusion of commercial in confidence information in SMC submissions.
- Standardise data collection at Board level in relation to systems and process for requests to access non-formulary medicines.
- Clarify the future arrangements for the funding of end-of-life, orphan and ultra-orphan medicines.

- Review the data set and definitions for data relating to IPTRs (Individual Patient Treatment Request) collected by Boards with the aim of achieving consistency and comparability and also extending the dataset to include data on outcomes.
- Explore opportunities to learn from and collaborate with other health economies in relation to the assessment and managed introduction of new medicines and other health technologies.
- Standardise NHSScotland’s approach to formulary development and use.
- Review and evaluate the experience of PACS (Peer Approved Clinical System) to date with a view to deciding on any required modifications and thereafter agree a process and timescales for full roll out and implementation.
- Explore MAS with a view to early adoption in NHSScotland. These should build on the experience of complex PAS (Patient Access Scheme) within NHSScotland and payment by-results schemes in operation in other health systems.
- Review the proposal to introduce a “pause” in light of some of the wider changes and actions recommended in this report.
- Give SMC the additional decision option of “recommend for use subject to ongoing evaluation and future reassessment.”
- Make greater use of National Procurement in NSS to lead negotiations on behalf of NHSScotland on the cost of new medicines.
- Undertake a comparative review of the arrangements in place in the healthcare systems of other countries for the introduction of new medicines and specifically end-of-life orphan and ultra-orphans, seeking to learn from their experiences.
- Monitor the demands made on SMC and its associated processes and ensure that the available capacity and capability and support mechanisms are adequate for SMC’s needs.
- Consider through wide stakeholder engagement the best way for NHSScotland to take advantage of the opportunities afforded by anticipated developments in the way that new medicines will be introduced in the future. This is likely to be through the establishment of a multi-agency taskforce or equivalent group.
- Consider how the experience of NHSScotland’s systems for the assessment and managed introduction of new medicines can inform the development of a Scottish Model of Value. This is likely to be through the establishment of a multi-agency taskforce or equivalent group.

### **Chief Medical Officer’s (CMO) Annual Report: Realising Realistic Medicine**

The CMO’s second annual report was published in February. It builds on Dr Calderwood’s first annual report on Realistic Medicine – setting out its vision and priorities; showcasing international and national multi-professional support from clinicians, leaders from medicine and public health and stakeholders from a wide group of organisations; and outlining her plans for engagement with patients and the wider public during 2017. It also contains a traditional snapshot of the Health of the Nation.

Contact: [REDACTED] – March 2017

## SCOTLAND'S LIFE SCIENCES BUSINESS SECTOR

## ANNEX G

**ISSUE:** Life sciences is a key sector of the Scottish economy as highlighted in Scotland's Economic Strategy. Scotland has a thriving life sciences community. Recognised for the distinctive capabilities of our business base and research institutions, international reputation and potential for significant growth and creation of high value jobs.

**KEY POINTS**

**The sector plays an important role in producing economic benefits for Scotland as well as its ability to improve the quality of care and health for people in Scotland and globally**

- Life sciences is a tremendously important sector for Scotland. In 2014, the wider sector turnover was £4.3 billion, with GVA at £2 billion. It employs 37,200 people across 719 organisations<sup>1</sup>.
- Since 2010 the life sciences sector has seen a 29% growth in turnover and 24% growth in GVA.
- Business Enterprise Research and Development (BERD) spending in the Life Sciences was £285 million in 2015. This represents 32.7 per cent of the total BERD spend in Scotland.<sup>2</sup>

**The Scottish Government is committed to providing a supportive environment for businesses.**

- Scotland's industry-led life sciences strategy, the introduction of Enterprise Areas for Life Sciences, initiatives such as the Health Innovation Partnerships, and the Innovation Centre Programme, have enhanced support for the sector and sought to link it more effectively to the National Health Service in Scotland.
- The Life Sciences Scotland (LSS) Industry Leadership Group (formerly LiSAB) brings together key figures from the private and public sectors to drive industry wide collaboration and alignment. As well as the industry and ministerial chair, there are currently 14 industry members; 6 public sector members and 2 Associate members.
- The Life Sciences Strategy for Scotland 2025 Vision, the strategy refreshed by LSS, was published on 2 February 2017 and outlines the ambition of the industry to make Scotland the location of choice for the life sciences community and its mission is to increase the industry's contribution to the Scottish Economy to £8bn by 2025.<sup>3</sup>

**Scotland is at the forefront of life sciences attracting international attention and is an ideal place to invest.**

- 2 February 2017, Scottish based pharmaceutical firm Kyowa Kirin International, formerly ProStrakan, has revealed plans to expand its headquarters in Galashiels and to increase staff numbers from 150 to 200 over the next five years. (ProStrakan was acquired by Tokyo-based Kyowa Hakko Kirin Co. Ltd. (KHK) in 2011) (source: [BBC news – 2 February 2017](#))
- 7 December 2016, The University of Dundee has been awarded £13.6m to tackle some of the world's most devastating diseases. The money from Wellcome will be used to establish a new research centre at the university (source: [BBC News – 7 December 2016](#))
- 13 October 2016, Edinburgh based, med tech start-up Snap40 has secured the largest ever seed funding for a Scottish business. It has raised £2m in its first tranche of funding. (Source: [The Herald – 13 October 2016](#))
- 21 September 2016, The University of Dundee has renewed seven-figure funding from three top pharmaceutical companies, supporting work to launch and speed up the development of new drugs to treat diseases like cancer and Parkinson's. The £7.2 million funding from industry to academia comes from GlaxoSmithKline (GSK), Boehringer Ingelheim, and Merck, and secures 38 posts at Dundee for the next four years. (Source: [The Scotsman - 21 September 2016](#))

<sup>1</sup> <http://www.gov.scot/Topics/Statistics/Browse/Business/Publications/GrowthSectors>

<sup>2</sup> <http://www.gov.scot/Resource/0051/00513789.pdf>

<sup>3</sup> <http://www.lifesciencescotland.com/>

- 27 July 2016, Global Pharmaceutical firm GSK announced a £110m investment at its site in Montrose to build a state of the art production facility to manufacture respiratory medicines. This is part of a £275m investment by GSK to expand three UK sites. (source: BBC news - 27 July 2016)
- 12 July 2016, Japanese regenerative medical firm ReproCELL announced it is to merge two of its companies, with the new group based in Glasgow. Biopta and Reinnervate will merge to form ReproCELL Europe with the aim of strengthening ReproCELL's pharmaceutical industry-targeted drug discovery services and products through the integration of Biopta's human tissue services with Reinnervate's stem cell and 3D cell culture expertise. (Source: The Herald - 12 July 2016)

#### **Scotland has a very strong academic base in Life Sciences and Medicine**

- The latest QS World University Rankings (2015/16) lists two Scottish Universities amongst the best 100 universities in the world for Life Sciences and Medicines; the University of Edinburgh is ranked 28<sup>th</sup>, the University of Glasgow is 46<sup>th</sup>. (The University of Dundee is 116)<sup>4</sup>
- The Times Higher Education rankings for Life Sciences (2016) list 5 Scottish Universities in the top 100: Edinburgh (19<sup>th</sup>), St Andrews (74<sup>th</sup>), Glasgow (77<sup>th</sup>), University of Aberdeen (84<sup>th</sup>) and Dundee (85<sup>th</sup>).<sup>5</sup>

Contact: [REDACTED] March 2017

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<sup>4</sup> [http://www.topuniversities.com/university-rankings/faculty-rankings/life-sciences-and-medicine/2015#sorting=rank+region="+country="+faculty="+stars=false+search="](http://www.topuniversities.com/university-rankings/faculty-rankings/life-sciences-and-medicine/2015#sorting=rank+region=)

<sup>5</sup> [https://www.timeshighereducation.com/world-university-rankings/2016/subject-ranking/life-sciences-0#!/page/0/length/25/sort\\_by/rank\\_label/sort\\_order/asc/cols/rank\\_only](https://www.timeshighereducation.com/world-university-rankings/2016/subject-ranking/life-sciences-0#!/page/0/length/25/sort_by/rank_label/sort_order/asc/cols/rank_only)

## TOSHIBA MEDICAL VISUALISATION SYSTEMS (TMVS)

## ANNEX H

Following the LSS meeting, Ministers will be accompanied by TMVS President Ken Sutherland to a separate room for a brief lunch whilst hearing about TMVS. This will be followed by some demonstrations of their world leading technology to show the work being delivered in Edinburgh and through their relationship with their parent company in Japan and how their technology is being adopted globally.

Ken may raise issues relating to the business only being able to maintain their position if they can continue to recruit and retain top talent and that general business conditions remain competitive internationally. These are all issues that have been discussed at previous LSS meetings and are featured in the Life Sciences Strategy for Scotland.

Ken Sutherland, President of TMVS is also the current chair of the Scottish Lifesciences Association (SLA) as well as being a LSS member. Andy Smout, Vice President: Research, Technology & Architecture and Malcolm Campbell, Vice-President: Product Development, Engineering and Test will also accompany Ministers on the tour.

### Background

TMVS designs and develops software that creates dynamic 3D images from the output of CT, MRI and other scanners; these are used by clinicians to improve the diagnosis of serious medical conditions. TMVS Edinburgh R&D Centre currently employs 100+ and is SE account managed. TMVS leaders & employees are highly skilled in software development. TMVS have a positive relationship across SE/SDI.

TMVS was originally founded as Voxar in 1995, they began to work with Toshiba in 1999 and were acquired by them in 2009. In December 2016, TMVS was purchased by Canon Ltd under Phase V of its Excellent Global Corporation Plan, a five-year initiative launched in 2016. Canon aims to embrace the challenge of new growth through a grand strategic transformation. Canon intends to cultivate its health care business within the safety and security sector as a next-generation pillar of growth.

### Scottish Enterprise Support (provided by SE - March 2017)

- R&D project - £833k. Diversification project enabling the company to secure new internal customer. Support approved in March 2015
- R&D investment of £3.9m to establish the data driven healthcare R&D programme (April 2015 – April 2018) Project did not materialise due to Toshiba Corp financial difficulties disclosed in 2015. Canon acquisition suggests potential for up to date project. SE now working with TMVSE with a view to submitting R&D application April 2017
- Leadership Development Project 2015 - £14k
- Value proposition project 2016 - £18k
- Intelligence sharing via SDI – acquisition process by Canon during due diligence/competition vetting – March-Nov 2016
- Intel gathering of potential purchasers of Toshiba Medical System – parent of TMVSE – Jan16
- SE/SDI visiting Japan to meeting TMVS officials to espouse Scotland's med tech/informatics assets/ future growth potential - 2015/16

## KEY LIFE SCIENCES MINISTERIAL AND OFFICIALS ENGAGEMENTS

## ANNEX I

Date of Visit	Company	Sub- Sector	Minister/Official
2017			
13/01/17	Sandra Auld, ABPI	Big pharma	Mary McAllan (Director of Economic Development) Paul Wheelhouse
18/01/17	BioCity, Newhouse	all	Leslie Evans (Permanent Secretary)
26/01/17	Ken Sutherland, SLA	all	Richard Rollison (Deputy Director of Innovation, Investment and Industries Division)
01/02/17	SLA		Paul Wheelhouse
01/02/17	BioQuarter, Edinburgh (EM Imaging and Farr Institute)		Paul Wheelhouse and Leslie Evans
02/02/17	Life Sciences Annual Dinner and Awards	all	FM, DFM, Mr Russell
02/02/17	GSK (in parliament)	manufacturing	Chief Scientific Advisor
03/02/17	Dundee University	Drug discovery	DFM
07/02/17	Wellcome Trust (in parliament)	Research	Paul Wheelhouse
09/02/17	Dave Tudor (in parliament)	LSS	Paul Wheelhouse
01/03/17	Life and Chemical Sciences leadership programme (in parliament)	manufacturing	Paul Wheelhouse
07/03/17	SLA	all	Richard Rollison
09/03/17	Snap40, Edinburgh (David Bowie)	Med tech	Paul Wheelhouse
14/03/17	LSS	all	Paul Wheelhouse and Aileen Campbell
16/03/17	SLA	all	Mary McAllan
29/03/17	ABPI	Big pharma	Shona Robison
29/03/17	Imaging Centre of Excellence Opening (ICE) Glasgow Uni and QEUH, Glasgow	research	Paul Wheelhouse - TBC
18/04/17	Kyowa Kirin, Galashiels (Tom Stratford)	pharma	Catherine Calderwood, Chief Medical Officer
23/05/17	BioDundee – keynote speech	all	Paul Wheelhouse
13/06/17	LSS	all	Shona Robison
07/11/17	LSS	All	Paul Wheelhouse and Aileen Campbell

## ATTENDEE LIST

## ANNEX J

<b>Attending</b>	
Mr Wheelhouse	Minister for Business, Innovation and Energy – co-chair
Ms Campbell	Minister for Public Health and Sport
Dave Tudor	GSK – Industry co-chair
Andy Taylor	ABHI
Colin King	Omega
David Bowie	snap40
David Scott	Tepnel
Deborah O'Neill	NovaBiotics
Fraser Black	James Hutton
James Cameron	HIE
John A Brown	SLA
John MacKenzie	Roslin Biocentre
Julia Brown	SE
Karen McAvenue	Scottish Government
Keith Small	ABPI
Ken Sutherland	TMVS
Kevin Moore	Business Therapies
Marie Claire Parker	Stratified Medicine Scotland
Ricky Verrall	Scottish Government CSO
Tom Stratford	Kyowa kirin
Avril Gold	Canopus
Helen Glass	Canopus
Julie Stuart	Scottish Government
Sharon Donnelly	Scottish Government
Ronnie Palin	SDS for Skills agenda item
<b>Apologies</b>	
Andrew Morris	Chief Scientist
Brian Bathgate	Charles River
Julie Brittenden	NRS / Glasgow University
Sinclair Dunlop	Epidarex



MAP

ANNEX K

Toshiba Medical Visualization Systems Europe, Ltd (TMVS), Bonnington Bond, 2 Anderson Place, Edinburgh, EH6 5NP

