spgl

Managing Quality
Improving Performance

November 2017

QUALITY TIMES

RECRUITMENT INCENTIVE PROGRAM

FACTS & FIGURES

SPOTLIGHT: TOM BLOM TALKS ABOUT HIS PROJECT EXPERIENCE

DATA INTEGRITY

BRAINIAC DAYS

SPGL Newsletter

November 2017

SPGL AT THE BRAINIAC-DAY IN 2017

IN THIS ISSUE

SPGL Newsletter

We are excited to bring you our very first SPGL newsletter. Our aim is to deliver this newsletter every quarter, with the following regular features:

- Colleague project in spotlight
- New Employee(s)
- Facts & Figures
- Technology (new, upcoming…)
- Legislation (FDA, EP…)
- Articles
- Training

In addition to the regular features, the newsletter will also include topics of special interest, such as Computer or Process Validation. If there are particular subjects that you would like to see in future editions, please let the editorial team know.

The headline article of this issue describes "Data Integrity", which is one of the subjects the FDA is currently focusing on. So what exactly is Data Integrity? This article can be found on page 4.

In this edition, one of our Consultants talks about their project and provides a brief overview of the products, processes and the key deliverables. Perhaps you have some questions in a related area – please feel free to get in touch.

This issue also provides a brief status of our Recruitment Incentive Program that was launched during our last summer gathering.

In every issue of the newsletter we will try to include changes and/or updates to legislation as well as new and upcoming technologies.

If you have read something that you might think could be valuable, please let us know by sending us the article or a web link.

We hope you enjoy this first issue and your feedback is always welcome!

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Recruitment Incentive Program

SPGL's Recruitment Incentive Program was launched during our recent Brainiac Day. This program was created in order to try and attract new colleagues to our group.

We all know that the best way to recruit new talent is by referral from our existing staff, therefore we need your help!

Recruitment Incentive Program Summary:

Prerequisites:

Qualification Period: August 2017 – July 2018

Recruitment occurs as a result of individual referral from an SPGL employee.

This applies to the hiring of permanent employees only.

Targets:

- Recruit 6 people – SPGL will organize a fun team building event such as paint ball, a golf initiation day, bowling etc.
- Recruit 8 people – SPGL will organize a night out in the city in Belgium, including a hotel & entertainment.
- Recruit 12 people – SPGL will organize a city break in Europe including flights, hotel and entertainment.

How can you help?

In order to achieve these targets, you can "promote" SPGL to potential recruits and convince them to meet our team (Inge, Stefan & Tom) in the Antwerp office to hear the SPGL story – the Antwerp team will do the rest.

As you have noticed a WhatsApp group has been created. Any questions or request for support can be asked here.

Current status:

No recruits so far, but the first interviews are planned.

Please let team know if you require any materials e.g. brochures, business cards etc. to help you with this.

It would be fantastic if we could achieve this both for the company and for the team!

Colleague(s): Facts & Figures

Floris Suy:

Started as a consultant in September at Alcon in Puurs (a Novartis company).

Jens Plasschaert:

Started in October as Business Development Lead to support the Belgian SPGL office.

Jurian De Craene:

Started as a consultant in November at Alcon in Puurs (a Novartis company).

Annelies Peeters:

Congratulations to Annelies and her partner who are expecting their first child in April 2018!

Tom Blom:

Congratulations to Tom and his wife who are expecting their first child in February 2018!

Jens Plasschaert:

Congratulations to Jens and his wife who are expecting their first child in May 2018!

In the Spotlight

In this edition Tom Blom talks about his current project at Sanofi Genzyme in Geel.

The company

Sanofi Genzyme is a biotech company with two manufacturing facilities & three products in their portfolio:

Myozyme® (alglucosidase alfa), for Pompe Disease, is commercially produced in Geel, Belgium. Myozyme® was the first treatment for Pompe disease and one of the first for an inherited muscle disorder. Launched in the EU & US, in the first half of 2006, it serves approximately 1,100 in 35 countries.

NeoGAA® is a pegylated form of Myozyme®. Geel also produces NeoGAA® for Phase III clinical trials. NeoGAA® potentially improves the stability and efficacy of Myozyme®.

Dupilumab® is a fully human monoclonal Antibody (mAbs). It is believed to be a critical pathway in allergic inflammation.

Dupilumab is planned to be produced in an existing facility in Geel, however, this facility (which comprises of two, 10,000 litre bioreactors) will be unable to produce sufficient drug substance to meet the anticipated market demand.

Therefore, the facility in Geel will be extended in order to increase overall capacity. The facility extension for Dupilumab was approved in August 2015 and will deliver a capacity of an additional six, 10,000 litre bioreactors.

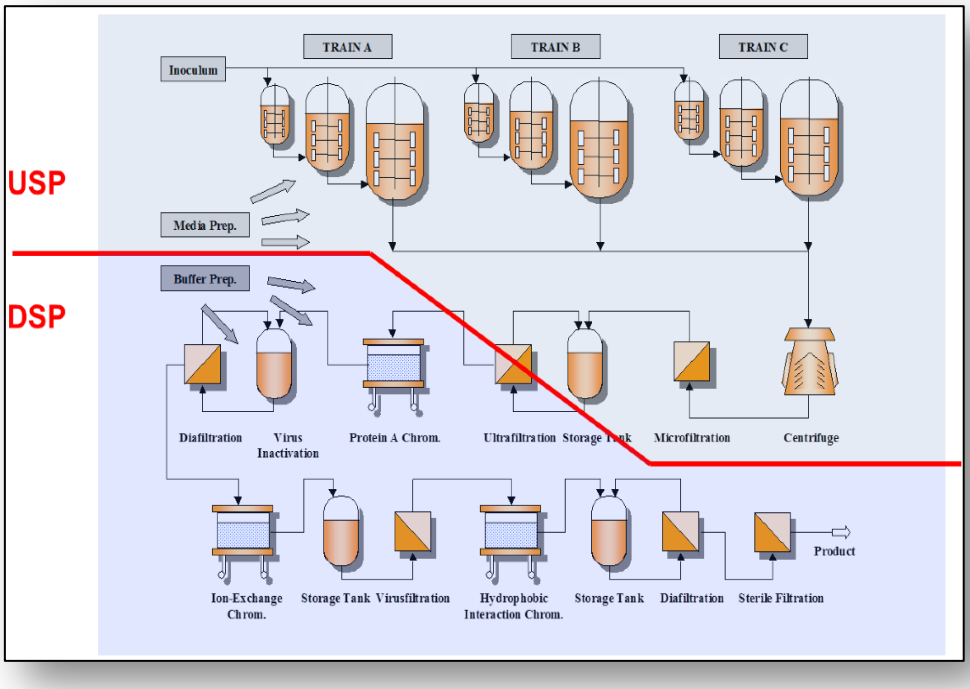
The Process

The process can be divided into two parts, the upstream and the downstream process. The upstream part of a bioprocess refers to the first step in which microbes/cells are grown, e.g. bacterial or mammalian cell lines, in bioreactors. Upstream processing involves all the steps related with inoculum development, media development, improvement of inoculum by genetic engineering process, optimization of growth kinetics so that product development can improve tremendously. Equipment used during the upstream process generally includes small wave bags followed by bioreactors increasing in size. The last part of the upstream process consists of the first rough separation steps.

The downstream part of a bioprocess refers to the part where the cell mass from the upstream are processed to meet purity and quality requirements. Typical equipment includes chromatography skids (including columns), such as Anion Exchange, Cation Exchange and Hydrophobic interaction. Furthermore viral inactivation and filtration skids are used. Eventually the product will be filled in bottles or bags. These will be transferred to a filling facility.

Next to preparation, the execution of the IQ protocols has started. During IQ execution, amongst others, the materials of the specified equipment are verified if these meet the acceptance criteria (316L,EPDM, electropolished, Ra, certificates etc.), weld logs are checked, the P&ID (Piping & Instrumentation Diagrams) is verified against the field installation and against the graphics in the DeltaV control system.

During OQ, the functional tests will be performed (steam testing, alarm testing, flow testing etc.). Thereafter, the PQ and subsequently PV will start.



The picture above shows the different steps of an USP and DSP process. (The picture is not representative for Sanofi).

Consultants Key Tasks

As part of the validation team for new facility, my main activities included the preparation of documents for USP and DSP equipment (as described earlier):

- User Requirement Specifications (what must the equipment be able to do and against which parameters)
- System Impact Assessments (identify the risks of the equipment to product impact and what has to be checked during IQ/OQ to minimize the risk)
- IQ / OQ protocols

FOR MORE INFORMATION ON THIS TOPIC

Contact Tom Blom: tom.blom@spgl.eu

SHARE YOUR STORY IN THE NEXT EDITION?

Send an email to: tom.blom@spgl.eu

Data Integrity and Compliance with cGMP Guidance for Industry according to FDA

by Veronique Schnabel

In recent years, the FDA has increasingly focused on data integrity. The cGMP violations involving data integrity has increased during inspections. This is a negative trend because ensuring data integrity is an important component of the industry's responsibility to ensure the safety, efficacy and quality of drugs and FDA's ability to protect the public health.

The data integrity – related cGMP violations have led to numerous regulatory actions, including warning letters, important alerts and consent decrees.

Requirements with respect to data integrity in parts 211 and 212, among other things, include:

- Backup data are exact and complete, secure from alteration, inadvertent erasures or loss
- Data is stored to prevent deterioration or loss
- Activities are documented at the time of performance
- Records are retained as original records, true copies
- Complete information, complete data derived from all tests,

Electronic signatures and record-keeping requirements are laid out in 21 CFR part 11.

What is Data Integrity ?

Data integrity refers to the completeness, consistency and accuracy of data. Complete, consistent and accurate data should be attributable, legible, contemporaneously recorded, original and accurate (ALCOA)

What is Metadata?

Metadata is contextual information required to understand data. A data value is by itself meaningless without additional information about the data. Metadata is often described as data about data. Metadata is structured information that describes, explains or otherwise makes it easier to retrieve, use or manage data.

Among other things, metadata for a particular piece of data could include a date/time stamp for when the data were acquired, a user ID of the person who conducted the test or analysis that generated the data, the instrument ID used to acquire the data, audit trails, etc.

Data should be maintained throughout the record's retention period with all associated metadata required to reconstruct the cGMP activity. The relationships between data and their metadata should be preserved in a secure and traceable manner.

What is an audit trail?

Audit trail means a secure, computer-generated, time-stamped electronic record that allows for reconstruction of the course of events relating to the creation, modification or deletion of an electronic record. An audit trail is a chronology of the "who, what, when and why' of a record.

Electronic audit trails include those that track creation, modification or deletion of data such as processing parameters and results and those that track actions at the record of system level such as attempts to access the system or rename or delete a file.

cGMP compliant record keeping practice prevent data from being lost or obscured. Electronic record-keeping systems, which include audit trails, can fulfill these cGMP requirements.

What means 'static' and 'dynamic' related to record formats?

A static record is used to indicate a fixed-data document such as a paper record or an electronic image. A dynamic record means that the record format allows interaction between the user and the record content.

What is a backup?

A backup is a true copy of the original data that is maintained securely throughout the records retention period. The backup file should contain the data which includes associated metadata and should be in the original format or in a format compatible with the original format.

This should not be confused with backup copies that may be created during normal computer use and temporarily maintained for disaster recovery. Such temporary backup copies would not satisfy the requirement to maintain a backup file or data according to paragraph 211.68.

When does electronic data becomes a cGMP record?

All data generated to satisfy a cGMP requirement becomes a cGMP record. Data must be documented or saved at the time of performance to create a record in compliance with cGMP requirements. It is expected that the process is designed so the quality data that is created and maintained cannot be modified.

It is not acceptable to record data on pieces of paper that will be discarded after the data are transcribed to a permanent laboratory notebook. Similarly, it is not acceptable to store data electronically in temporary memory, in a manner that allows for manipulation, before creating a permanent record. Electronic data that are automatically saved into temporary memory do not meet cGMP documentation or retention requirements.

A combination of technical and procedural controls to meet cGMP documentation practices for electronic systems may be employed. For example, a computer system such as a LIMS or EBR system can be designed to automatically save after each separate entry. This would be similar to recording each entry contemporaneously on paper batch record to satisfy cGMP requirements. The computer system could be combined with a procedure requiring data be entered immediately when generated.

FOR MORE INFORMATION

FDA guidance document april 2016

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SPGL Brainiac Days

by Axel Henning

What a Nice Way to Learn and Share Knowledge

Following our successful Brainiac Day in September last year, we held another training event this summer.

This time the venue was an old yeast factory in Wijnegem along the Albert canal. We decided to opt for an informal classroom setting, creating an inspiring atmosphere that would invite everybody to relax. Upon arrival all participants received a nice goody bag.

This annual event is not only a great opportunity to learn, but also to catch up with existing colleagues and as well as meet new recruits.

The topics addressed during this year's event included Process Validation, by Maureen, Quality Assurance, by Patrick and Sterilization/Cleaning Validation by myself.

Also memorable that day was the exceptional weather with the temperature, climbing to a sweaty 33°C. It was no problem to keep hydrated as refreshments were within easy reach. The fans were revving at their maximum and ice creams provided a welcome cooling moment. Some outdoor water games made a lot of fun during the breaks.

Our interesting learning experience was followed by a very tasteful and original BBQ. Laughter and chatting filled the air while the sun was setting, announcing the end of another fantastic day.

Next year we plan to organize another Brainiac Day with several new and interesting topics. It will be a special event as SPGL will be celebrating their 10th anniversary, watch this space!

I look forward to seeing you all again.

AGENDA		
TIMING	**TOPIC**	**SPEAKER**
1.00 – 1.45	Buffet Lunch	All
1.45 – 2.00	Welcome	A. Henning
2.00 – 2.45	Process Validation	M. Hoengenaert
2.45 – 3.30	Quality Assurance	P. Balis
3.30 – 3.50	Break	All
3.50 – 4.35	Sterilization	A. Henning
4.35 – 5.20	Cleaning Validation	A. Henning
5.20 – 5.40	Break	All
5.40 – 6.10	General Business Update	S. Kiebooms