



## **Tablet Process Development and Validation and the application of QbD**

**The Window Conference Venue London**

**9,10 & 11 July 2012**

**11, 12 & 13 December 2012**

### **Course objectives**

This interactive workshop provides up-to-date, relevant and detailed information on the impact of Quality by Design (QbD) on the Development and Validation of tablet manufacturing processes. It will also study the identification and evaluation of Critical Product Attributes and Critical Process Parameters for tablets, and their implications for process control. We develop new concepts including the use of risk and process matrices for risk management. The latest ICH and FDA guidance on Quality by Design and Process Development, published in 2009, will be comprehensively reviewed.

### **By the end of the course, you will**

- Understand the relationship between the principles of QbD and tablet development and process validation in generic and new product development
- Understand the relationship between material properties, formulation development and process development
- Understand the processes commonly used to manufacture tablets and the factors which affect them
- Recognise how to identify critical processing parameters, and how to incorporate into a process validation program
- Understand the principles of PAT, how and where it can be most effectively deployed
- Know the latest FDA thinking on Process Development including the three key steps of validation

### **Course Speaker**

**Dr Michael Gamlen** is Managing Director of Pharmaceutical Development Services Ltd, a pharmaceutical consultancy based in Nottingham (UK). Dr Gamlen has over 30 years experience of tablet development. Awarded a First Class Honours degree in Pharmacy, specialising in Pharmaceutical Engineering, he studied for a PhD at Nottingham University. He was Head of Tablet Development at the The Wellcome Foundation for 15 years, and worked as an outsourcing manager before starting his consultancy business in 2000.

Dr Gamlen specialises in managing product development, formulation, tablet and process development studies. He has been teaching professional tableting courses for many years and his courses are highly rated, exceeding the expectation of the participants in many cases.

Michael continually updates the content of his courses with the latest guidance and extracts of up-to-the minute scientific papers. He provides a substantial body of relevant literature to all course participants as well as copies of all notes and guidance used and a workbook. He is a popular and highly respected presenter.

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## Who should attend?

The course is designed for people new to Process Development, and those requiring a refresher in the area. It will also benefit Process Development experts wishing to extend their understanding of why products processes can go wrong, and regulatory and quality personnel who need to understand the development process better.

The course will include the latest FDA guidance on the development of generic products under QbD.

## Course outline:

### Day 1:

#### Morning - Product development

- Principles of Quality by Design and the product development process
- Linking material properties to formulation and processing behaviour
- FDA Guidance on Process Validation

**Workshop session** - Understanding Quality by Design

#### Afternoon - Mixing, and dry granulation

- Identifying potential Critical Process Parameters.
- Unit processes 1 - Mixing and blending
- Assessing blend uniformity. Sampling problems and practice

**Workshop session** - blend assessment practical. Effect of material properties on powder mixing behaviour

### Day 2:

#### Morning - EFPIA Case study. Wet granulation

- The new regulatory landscape. Q8, Q9 and Q10 and their impact on product and process development.
- EFPIA case study - what would a QbD regulatory submission look like?
- Use of Process Matrices in process development
- Developing wet granulation processes
- Granulation endpoint control

#### Afternoon - Drying, compression and film coating

- Drying - techniques and process control
- Compression - opportunities and threats!
- Developing film coating processes
- Round-up session

### Day 3: Practical, at County House, Beckenham. Transport provided.

- Blending
- Granulation
- Drying
- Milling
- Sieving
- Compression
- Granule and product characterisation

## NOTE

Wherever possible participants should bring practical problems and examples which can be reviewed on the course. The course will be highly participative and useful for people with or without experience. Numbers are restricted to guarantee personal involvement.

*The experts on tablets and tableting*

## Venue

**Days 1 & 2 - Window Conference Venue** 13 Windsor Street, Islington London, N1 8QG convenient for central London, in a pleasant informal setting.

**Day 3—County House, Beckenham Road Beckenham near London**

*(Transport provided from central London)*

Course fee includes all course materials, refreshments and lunch, accommodation is not included.

Accommodation and travel directions are available on our website

[www.pharma-training-courses.com](http://www.pharma-training-courses.com)

Numbers are limited to give participants the opportunity for thorough discussion of the issues to be covered by the programmes and one-to-one consultation with speaker(s)

## Terms and Conditions

### Liability

PharmaTraining Ltd reserves the right to change the programme, speakers, date or venue without notice or cancel the event. If cancellation occurs delegates will be notified as soon as possible and will receive full refund of fees paid.

PharmaTraining Ltd will not be responsible for any airfare, accommodation or other travel costs incurred.

### Delegate fees

Fees for this programme are shown overleaf. Delegate fees are inclusive of course documentation, refreshments, lunch and evening reception or social programme.

Payment of the registration fee must be paid within 14 days of commencement of the course. Upon receipt of payment, a proof of payment will be sent to you.

### Cancellation Policy

Full refunds less a handling fee of £100 will be made for cancellations received in writing within 28 days of the commencement of the course. Refunds of 50% will be made for cancellations received in writing between 28 and 7 days prior to the commencement of the course. Regrettably no refunds will be made after 7 days prior to commencement of the course. Substitutions can be made at any time.

If you are interested in this course you may also be interested in:

**Pre-formulation Studies for Tablet Development** 21 & 22 June

**Tablet Formulation Development** 25 & 26 June

**Tablet Formulation Development— Formulation Development in Practice** 27 June

**Hands-on Tablet Development including Pre-Formulation, Formulation and Process Development** 4 - 6 July

**Pre-formulation Studies for Tablet Development** 29 & 30 November

**Tablet Formulation Development** 3 & 4 December

**Tablet Formulation Development— Formulation Development in Practice**  
5 December

**Oral Solid Dosage Manufacturing Technology** 14 December

**Development and Manufacture of Effervescent Tablets** 14 December

## REGISTRATION DETAILS

### Tablet Process Development, Validation and the application of QbD:

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**Early-bird fee:** 3 day course £1593.00 (+ VAT £318.60 if applicable, see notes on VAT)  
*if booked and paid eight weeks prior to course commencement*

**Full Fee:** 3 day course £1770.00 (+ VAT £354.00 if applicable, see notes on VAT)

**UK:** Under UK law all UK-based applications are subject to VAT at the prevailing rate however most UK VAT registered companies/organisations can reclaim this tax.

**EU:** With effect from 1 January 2011 applications from delegates whose companies are based in EU countries will not be subject to VAT **PROVIDED THAT** valid VAT ID details are provided at the time of booking, otherwise VAT will be charged.

**OTHER:** With effect from 1 January 2011 applications from delegates whose companies are based outside of the UK/EU will be outside the scope of VAT, ie no VAT is charged or payable.

Discount of 10% applies for booking 8 weeks in advance. Discount of 10% applies for booking more than 1 delegate. Discount of 10% applies for booking more than 1 course. **Maximum discount received is 15%**

#### Methods of Payment available:

Cheque (**Please make payable to "PharmaTraining Ltd"**)

Bank transfer

Credit/Debit Card

**Online Registration is available on our website:**

**[www.pharma-training-courses.com](http://www.pharma-training-courses.com)**

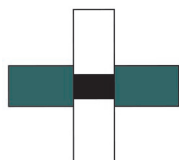
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All of our tableting courses are supported by Gamlen Tableting Ltd, leading provider of expertise, equipment and services in the design, development and manufacturing of pharmaceutical tablet dosage forms.

Designer and developer of the Gamlen Tablet Press, the GTP1, the World's only bench top computer controlled tablet press.

**[www.gamlen.co.uk](http://www.gamlen.co.uk)**



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