



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Health systems and products
Medicinal products – quality, safety and efficacy

Consultation document

Commission Delegated Act on Principles and guidelines on good manufacturing practice for investigational medicinal products for human use and inspection procedures, pursuant to the first subparagraph of Article 63(1) of Regulation (EU) No 536/2014

The sole purpose of this consultation is to collect views, relevant evidence and information from stakeholders to help the European Commission develop its thinking in this area with a view of preparing the required delegated act.

This document does not necessarily reflect the views of the European Commission and should not be interpreted as a commitment by the Commission to any official initiative in this area.

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1 **1. INTRODUCTION**

2 Regulation (EU) No 536/2014 of the European Parliament and of the Council on clinical
3 trials on medicinal products for human use, and repealing Directive 2001/20/EC¹ requires
4 that the Commission adopt delegated acts to specify the principles and guidelines of good
5 manufacturing practice and the detailed arrangements for inspection for ensuring the
6 quality of investigational medicinal products.

7 Adherence to good manufacturing practice for investigational medicinal products for
8 human use by manufacturers of such medicinal products is instrumental in ensuring the
9 quality of the products which in turn will be an element in safeguarding the safety of the
10 clinical trial subjects and in ensuring the reliability and robustness of the data generated
11 in the trial.

12 Currently, Commission Directive 2003/94/EC of 8 October 2003 laying down the
13 principles and guidelines of good manufacturing practice in respect of medicinal products
14 for human use and investigational medicinal products for human use² also sets out
15 principles and guidelines for good manufacturing practice for investigational medicinal
16 products for human use.

17 However, once Regulation (EU) No 536/2014 becomes applicable, manufacture and
18 import of investigational medicinal products use in clinical trials carried out under that
19 Regulation cannot follow the good manufacturing practice for investigational medicinal
20 products for human use set out in Directive 2003/94/EC. Instead those investigational
21 medicinal products have to be manufactured or imported under good manufacturing
22 practice for investigational medicinal products for human use laid down by the Delegated
23 Act provided for in Article 63(1) of Regulation (EU) No 536/2014.

24 The first subparagraph of Article 63(1) of Regulation (EU) No 536/2014 further provides
25 that the Commission shall adopt Delegated Acts on the detailed arrangements for
26 inspections.

27 As good manufacturing practice for investigational medicinal products for human use
28 already exists and is generally well-functioning, there is no need to reinvent the wheel
29 and therefore, this consultation document carries over the majority of the principles and
30 guidance set out in Directive 2003/94/EC relating to investigational medicinal products
31 for human use.

32 However, a new provision is proposed with regard to adaptation of good manufacturing
33 practice for advanced therapy investigational medicinal products.

34 The topics of this consultation document concerning good manufacturing practice for
35 investigational medicinal products for human use should be read in conjunction with the
36 consultation on detailed Commission guidelines on principles of good manufacturing
37 practice for investigation medicinal products for human use, pursuant to the second
38 subparagraph of Article 63(1) of Regulation (EU) No 536/2014, as that Commission
39 guideline will supplement these Delegated Acts.

¹ OJ L 158, 27.5.2014, p.1.

² OJ L 262, 14.10.2003, p. 22.

40 Article 63(4) of Regulation (EU) No 536/2014 puts an obligation on Member States to
41 ensure compliance with good manufacturing practice for investigational medicinal
42 products through inspections. For arrangements for inspections, inspiration for this
43 consultation document is drawn from provisions on inspections of Directive 2001/83/EC
44 and from already existing procedures
45 ([http://www.ema.europa.eu/docs/en_GB/document_library/Regulatory_and_procedural_](http://www.ema.europa.eu/docs/en_GB/document_library/Regulatory_and_procedural_guideline/2009/10/WC500004706.pdf)
46 [guideline/2009/10/WC500004706.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/Regulatory_and_procedural_guideline/2009/10/WC500004706.pdf)) agreed by the Member States.

47 With this public consultation, the Directorate-General for Health and Food Safety seeks
48 the views of stakeholders regarding the content of such Delegated Acts.

49 **2. PRINCIPLES AND GUIDELINES OF GOOD MANUFACTURING PRACTICE FOR** 50 **INVESTIGATIONAL MEDICINAL PRODUCTS FOR HUMAN USE**

51 **2.1. Conformity with good manufacturing practice**

52 The manufacturer shall ensure that the manufacturing or import operations for
53 investigational medicinal products for human use are carried out in accordance with
54 good manufacturing practice for investigational medicinal products laid down in the
55 Commission Delegated Regulation on good manufacturing practice for
56 investigational medicinal products, with Regulation (EU) No 536/2014 and with the
57 authorisation referred to in Article 61(1) of Regulation (EU) No 536/2014.

58 The importer of investigational medicinal products for human use shall ensure that
59 the products have been manufactured by applying quality standards at least
60 equivalent to those laid down by the Commission Delegated Regulation and in
61 accordance with Regulation (EU) No 536/2014.

62 The importer of investigational medicinal products for human use shall ensure that
63 the manufacturer located in a third country is entitled to manufacture the relevant
64 type of investigational medicinal product in that country.

65 **2.2. Compliance with the clinical trial authorisation**

66 The manufacturer shall ensure that all manufacturing operations for investigational
67 medicinal products for human use are carried out in accordance with the information
68 provided by the sponsor pursuant to Article 25 of Regulation (EU) No 536/2014 and
69 as authorised by the Member States.

70 The manufacturer shall regularly review his manufacturing methods in the light of
71 scientific and technical progress and the development of the investigational
72 medicinal product.

73 **2.3. Pharmaceutical quality system**

74 A pharmaceutical quality system means the total sum of the organised arrangements
75 made with the objective of ensuring that medicinal products are of the quality
76 required for their intended use.

77 The manufacturer shall establish, implement and maintain an effective
78 pharmaceutical quality system, involving active participation of the management
79 and personnel of the different departments.

80 **2.4. Personnel**

81 At each manufacturing site, the manufacturer shall have a sufficient number of
82 competent and appropriately qualified personnel at his disposal to achieve the
83 objective of the pharmaceutical quality system.

84 The duties of managerial and supervisory staff, including the qualified persons,
85 responsible for implementing and operating good manufacturing practice shall be
86 defined in job descriptions. Their hierarchical relationships shall be defined in an
87 organisation chart. Organisation charts and job descriptions shall be approved in
88 accordance with the manufacturer's internal procedures.

89 The managerial and supervisory staff shall be given sufficient authority to discharge
90 their responsibility correctly.

91 The personnel shall receive internal and on-going training, the effectiveness of
92 which shall be verified, covering in particular the theory and application of the
93 concept of pharmaceutical quality and good manufacturing practice, including in
94 particular requirements for the manufacture of investigational medicinal products
95 for human use.

96 Hygiene programmes adapted to the activities to be carried out shall be established
97 and observed. These programmes shall, in particular, include procedures relating to
98 health, hygiene practice and clothing of personnel.

99 **2.5. Premises and equipment**

100 Premises and manufacturing equipment shall be located, designed, constructed,
101 adapted and maintained to suit the intended operations.

102 Premises and manufacturing equipment shall be laid out, designed and operated in
103 such a way as to minimise the risk of error and permit effective cleaning and
104 maintenance in order to avoid contamination, cross contamination and, in general,
105 any adverse effect on the quality of the investigational medicinal product.

106 Premises and equipment to be used for manufacturing operations, which are critical
107 to the quality of the product, shall be subjected to appropriate qualification and
108 validation.

109 **2.6. Documentation**

110 The manufacturer shall establish and maintain a documentation system based upon
111 specifications, manufacturing formulae and processing and packaging instructions,
112 procedures and records covering the various manufacturing or import operations
113 performed. Documents shall be clear, free from error and kept up to date. Pre-
114 established procedures for general manufacturing operations and conditions shall be
115 kept available, together with specific documents on the manufacture of each batch
116 of investigational medicinal products for human use. That set of documents shall
117 enable the history of the manufacture of each batch and the changes introduced
118 during the development of an investigational medicinal product for human use to be
119 traced.

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Question 1a: Would a requirement for a product specification file (a reference file containing, or referring to files containing, all the information necessary to draft the detailed written instructions on processing, packaging, quality control testing, batch release and shipping of an investigational medicinal product) be useful to be introduced?

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Question 1b: Do product specification files exist for manufacture of all investigational medicinal products in the EU?

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The manufacturer shall retain batch documentation for at least five years after the completion or formal discontinuation of the last clinical trial in which the batch was used.

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Question 2: Different options exist for the retention period of batch documentation:

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a) Retention for at least five years after the completion or formal discontinuation of the last clinical trial in which the batch was used, whichever is the longer period.

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b) Retention for at least 25 years after the end of the clinical trial in line with the retention period of the clinical trial master file.

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Please indicate the preferred option with justification.

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When electronic, photographic or other data processing systems are used instead of written documents, the manufacturer shall first validate the systems showing that the data will be appropriately stored during the anticipated period of storage. Data stored in those systems shall be made readily available in legible form and shall be provided to the competent authorities at their request. The electronically stored data shall be protected, by methods such as duplication or back-up and transfer on to another storage system, against loss or damage of data, and audit trails shall be maintained.

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2.7. Production

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The different production operations shall be carried out in accordance with pre-established instructions and procedures and in accordance with good manufacturing practice. Adequate and sufficient resources shall be made available for the in-process controls. All process deviations and product defects shall be documented and thoroughly investigated.

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Appropriate technical or organisational measures shall be taken to avoid cross contamination and mix-ups. Particular attention shall be paid to the handling of products during and after any blinding operation.

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The manufacturing process shall be validated in its entirety in so far as is appropriate, taking into account the stage of product development.

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The manufacturer shall identify the process steps that safeguard the safety of the subject and the reliability and robustness of the clinical trial data generated in the clinical trial. The critical process steps, such as sterilisation, shall be validated.

160 All steps in the design and development of the manufacturing process shall be fully
161 documented.

162 **2.8. Quality control**

163 The manufacturer shall establish and maintain a quality control system placed under
164 the authority of a person who has the requisite qualifications and is independent of
165 production.

166 The person shall have at his disposal, or shall have access to, one or more quality
167 control laboratories appropriately staffed and equipped to carry out the necessary
168 examination and testing of starting materials and packing materials and the testing
169 of intermediate and finished investigational medicinal products for human use.

170 The manufacturer shall ensure that the contract laboratory complies with the content
171 of the dossier referred to in Article 25 of Regulation (EU) No 536/2014 as
172 authorised by the Member State. When products are imported from third countries,
173 analytical control in the Union shall not be mandatory.

174 **Question 3: Would it be feasible to require that Certificates of Analysis should**
175 **accompany each shipment of imported investigational medicinal products as a**
176 **means to ensure that analytical control had been carried out in the third**
177 **country? Please elaborate your answer to this question.**

178 During the final control of the finished investigational medicinal product before its
179 release for use in clinical trials, the quality control system of the manufacturer shall
180 take into account, in addition to analytical results, essential information such as the
181 production conditions, the results of in-process controls, the examination of the
182 manufacturing documents, the conformity of the product with its specifications and
183 conformity with the clinical trial authorisation, including the final finished pack.

184 Sufficient samples of each batch of bulk formulated product and of key packaging
185 components used for each finished investigational medicinal product batch shall be
186 retained by the manufacturer for at least two years after completion or formal
187 discontinuation of the last clinical trial in which the batch was used, whichever
188 period is the longer.

189 **Question 4a: Should retention samples also be required to be retained by the**
190 **manufacturer?**

191 **Question 4b: If only reference samples are required, would a requirement for**
192 **photos of the investigational medicinal product, the packaging and the labelling**
193 **to supplement the reference sample be useful? Please justify.**

194 Unless a longer period is required under the law of the Member State of
195 manufacture, the manufacturer shall retain samples of starting materials, other than
196 solvents, gases or water, used in the manufacturing process for at least two years
197 after the release of the product. That period may be shortened if the period of
198 stability of the material, as indicated in the relevant specification, is shorter. All
199 those samples shall be maintained at the disposal of the competent authorities.

200 Other conditions may be defined, by agreement with the competent authority, for
201 the sampling and retaining of starting materials and certain products manufactured

202 individually or in small quantities, or when their storage could raise special
203 problems.

204 **2.9. Responsibilities of the qualified person**

205 The qualified person referred to in Article 61(2)(b) of Regulation (EU) No 536/2014
206 shall be responsible for ensuring:

207 (1) In the case of investigational medicinal products for human use
208 manufactured in the Member State concerned, that each production batch has
209 been manufactured and checked in compliance with the requirements of the
210 Delegated Regulation on good manufacturing practice for investigational
211 medicinal products for human use and with the information provided
212 pursuant to Article 25 of Regulation (EU) No 536/2014;

213 (2) In case of investigational medicinal products for human use manufactured in
214 a third country, that each production batch has been manufactured and
215 checked in accordance with quality standards at least equivalent to those laid
216 down in the Union for good manufacturing practice for investigational
217 medicinal products for human use and with the information provided
218 pursuant to Article 25 of Regulation (EU) No 536/2014.

219 **Question 5a: In how many clinical trials authorised under the Clinical Trials**
220 **Directive³ has Article 13(3)(c) of that Directive been used? Please provide**
221 **figures both as actual number of trials and as a percentage of the trials**
222 **authorised, if available.**

223 **Question 5b: In how many clinical trials authorised under the Clinical Trials**
224 **Directive, is the comparator product not authorised in an ICH country (EU,**
225 **US, Japan, Canada and Switzerland)? Please provide figures both as actual**
226 **number of trials and as a percentage of the trials authorised, if available.**

227 In all cases, the qualified person shall certify in a register or equivalent document
228 provided for that purpose that each production batch satisfies the requirements of
229 good manufacturing practice for investigation medicinal products or at least
230 equivalent quality standards and the information provided in the application for the
231 authorisation of the clinical trial. The register or equivalent document must be kept
232 up to date as operations are carried out and must remain at the disposal of the agents
233 of the competent authority for at least five years after the completion or formal
234 discontinuation of the last trial in which the batch was used. The retention period of
235 the register will follow that of the batch documentation mentioned in section 2.6.

236 **2.10. Work contracted out**

237 Any manufacturing operation or operation linked thereto which is carried out under
238 contract shall be the subject of a written contract.

³ Directive 2001/20/EC of the European Parliament and of the Council of 4 April 2001 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the implementation of good clinical practice in the conduct of clinical trials on medicinal products for human use, OJ L 121, 1.05.2001, p. 34.

239 The contract shall clearly define the responsibilities of each party and shall define,
240 in particular, the observance of good manufacturing practice to be followed by the
241 contract acceptor and the manner in which the qualified person responsible for
242 certifying each batch is to discharge his responsibilities.

243 The contract acceptor shall not subcontract any of the work entrusted to him under
244 the contract without written authorisation from the contract giver.

245 The contract acceptor shall comply with the principles and guidelines of good
246 manufacturing practice laid down in the Delegated Act for good manufacturing
247 practice for investigational medicinal products and in accordance with Regulation
248 (EU) No 536/2014 and shall submit to inspections carried out by the Member States
249 pursuant to Article 63(4) of Regulation (EU) No 536/2014.

250 **2.11. Complaints, product recall and emergency unblinding**

251 The manufacturer shall, in cooperation with the sponsor, implement a system or
252 recording and reviewing complaints together with an effective system for recalling
253 promptly and at any time investigational medicinal products which have already
254 entered the distribution network. The manufacturer shall record and investigate any
255 complaint concerning a defect and shall inform the competent authority of any
256 defect that could result in a recall or abnormal restriction on supply.

257 All trial sites shall be identified and, in so far as possible, the countries of
258 destination shall be indicated.

259 In addition, for an authorised investigational medicinal product, the manufacturer of
260 such product shall, in cooperation with the sponsor, inform the marketing
261 authorisation holder of any defect that could be related to the authorised
262 investigational medicinal product.

263 Where required by the protocol of a clinical trial, the manufacturer shall implement
264 a procedure for the rapid unblinding of blinded products, where this is necessary for
265 a prompt recall. The manufacturer shall ensure that the procedure discloses the
266 identity of the blinded product only in so far as it is necessary.

267 **2.12. Self-inspection**

268 The manufacturer shall conduct repeated self-inspections as part of the
269 pharmaceutical quality system in order to monitor the implementation and respect of
270 good manufacturing practice and to propose any necessary corrective actions or
271 preventive actions. Records shall be maintained of such self-inspections and any
272 corrective action or preventive action subsequently taken.

273 **2.13. Advanced therapy investigational medicinal products**

274 The requirements of good manufacturing practice shall be adapted to the specific
275 characteristics of advanced therapy investigational medicinal products in accordance
276 with a risk-based approach.

277 The adaptation to the specific characteristics of those products will be elaborated in
278 a Commission guideline. On 23 July 2015, a targeted stakeholder consultation on
279 the development of good manufacturing practice for advanced therapy medicinal
280 products pursuant to Article 5 of Regulation 1394/2007 was launched with a

281 deadline for comments on 12 November 2015. That consultation also addresses
282 adaptations relevant to advanced therapy investigational medicinal products; the
283 consultation can be found here: [http://ec.europa.eu/health/human-use/advanced-](http://ec.europa.eu/health/human-use/advanced-therapies/developments/index_en.htm)
284 [therapies/developments/index_en.htm](http://ec.europa.eu/health/human-use/advanced-therapies/developments/index_en.htm).

285 3. INSPECTIONS

286 3.1. Supervision by inspection

287 By means of repeated inspections the Member States shall ensure that manufacturers
288 comply with the principles of good manufacturing practice laid down by Union law.

289 Member States shall carry out inspections of manufacturers located in third
290 countries to ensure that investigational medicinal products imported into the Union
291 are manufactured by applying quality standards at least equivalent to those laid
292 down in Union law. The frequency of such inspections shall be based on an
293 assessment of risk, but shall in any case take place if the Member States have
294 grounds for suspecting that the quality standards are lower than those laid down in
295 Union law.

296 Inspections may, if necessary, be unannounced.

297 3.2. Inspection reports

298 Following an inspection, an inspection report shall be drawn up and made available
299 to the inspected entity and the sponsor in accordance with Article 78(6) of
300 Regulation (EU) No 536/2014.

301 Before adopting the report, the Member State under whose responsibility the
302 inspection has been conducted shall give the inspected entity the opportunity to
303 submit comments.

304 3.3. Inspectors' empowerment

305 Inspections shall be carried out by officials (inspectors) representing the Member
306 State. The inspectors shall be empowered to:

307 (1) Inspect the manufacturing or commercial establishments of manufacturers of
308 investigational medicinal products for human use, and lay laboratories
309 employed by manufacturer to carry out quality control;

310 (2) Take samples including with a view to independent tests being carried out by
311 an Official Medicines Control Laboratory or a laboratory designated for that
312 purpose in a Member State;

313 (3) Examine any documents relating to the object of the inspection;

314 (4) Inspection the premises, records and document of the manufacturer.

315 Inspectors shall be provided with suitable means of identification.

316 **3.4. Inspectors' competence and obligations**

317 In addition to the qualifications set out in Article 49(2) and (3) of Directive
318 2001/83/EC and adequate training, the inspectors shall also have the following:

- 319 (1) Experience and knowledge of the inspection process;
- 320 (2) The ability to make professional judgments as to the conformance of the
321 inspected entity with the requirements of good manufacturing practice as laid
322 down in Union law;
- 323 (3) The ability to apply the principles of quality risk management;
- 324 (4) Knowledge of current technology relevant for inspections;
- 325 (5) Knowledge of the current technology for the product manufactured.

326 The inspectors shall be made aware of and maintain confidentiality whenever they
327 gain access to confidential information as a result of their inspections in accordance
328 with applicable Union legislation, national legislation or international agreements.

329 The qualifications, training and experience of each inspector shall be documented
330 and those records shall be maintained up to date.

331 Each inspector shall have access to a document setting out standard operating
332 procedures and giving details of duties, responsibilities and on-going training
333 requirements. These procedures shall be maintained up to date.

334 **3.5. Impartiality of inspectors**

335 Inspectors shall have no conflicts of interest and be independent of the sponsor, of
336 the clinical trial site, of the investigators involved, of persons financing the clinical
337 trial and of the manufacturer, as well as free of any undue influence that could affect
338 their impartiality.

339 Each inspector shall sign a statement declaring any financial or other link to the
340 entities inspected. The statement shall be taken into consideration when inspectors
341 are assigned to a specific inspection.

342 **3.6. Obligation for manufacturer to allow access to his premises**

343 The manufacturer shall allow inspectors access to his premise, records and
344 documents at all times.

345 **3.7. Consequence of non-compliance with GMP**

346 If an inspection reveals that the manufacturer seriously fails to comply with good
347 manufacturing practice as set out by Union law, the Member State shall suspend or
348 revoke the authorisation referred to in Article 61(1) of Regulation (EU) No
349 536/2014 as a whole or in part.