Urgent Field Safety Notice
SBN-CPS-2018-025

CPS / Serum Work Area Systems
Version 1
06-Mar-2019

cobas e 801 signal drop after ProCell II M bottle changeover

Product Name	**cobas e** 801 module (07682913001)
	cobas e 801 analytical unit (08454345001)
	ProCell II M (06908799190)
Affected Instrument Part GMMI / Part No	ProCell II M flowpath
	Not applicable
Instrument/System Affected	**cobas®** 8000 modular analyzer series
	cobas® pro integrated solutions
SW Version	Not applicable
Type of Action	Field Safety Corrective Action (FSCA)

Dear Valued Customer,

Description of Situation

We regret to inform you that we have received complaints describing signal drops on some **cobas e** 801 modules, due to degrading of ProCell II M in the flowpath caused by bacterial contamination. Investigations have shown that when this issue occurs, it may cause discrepant results approximately 15 determinations after the ProCell II M bottle changeover, for a period of up to 20 consecutive measurements

ProCell II M is a system solution used on **cobas e** 801 for the transport of the assay reactant mixture to the measuring cell and for Electrochemiluminescence (ECL) signal generation. There are 2 bottles of ProCell II M present on **cobas e** 801: an active bottle that is used for measurements and a stand-by bottle that is automatically used right after the first bottle is empty (ProCell II M bottle changeover).

Roche has received 27 global complaints involving 21 out of 2000 active **cobas e** 801 module/analytical units.

The potentially affected cobas e 801 modules/analytical units are only those that show at least <u>two</u> of the following conditions:
- Bacterial contamination of the flowpath or other signs of contamination
- [Finalization] is not daily performed
- Occurrence of alarms for "*ProCell On Board Stability Time (744-xxxxxx or 346-xxxxxx)*"

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- Reoccurrence of alarms for "*Abnormal Signal Low (345-000001)*"
- The system is operated in CLAS connection mode or rack reception mode > 8h

Please note that ProCell M (used on **cobas e** 601 module, **cobas e** 602 module and **MODULAR** *ANALYTICS* E-170) and ProCell (used on **cobas e** 411 analyzer) are not affected.

Please follow the recommendations given in the section "**Actions to be taken by the customer/user**" if at least two of the above described conditions apply.

Important Information

On affected **cobas e** 801 modules/analytical units, the ProCell II M flowpath is covered by a biofilm with ProCell II M resistant bacteria. If ProCell II M inside the flowpath is not exchanged regularly, like for example in the stand-by ProCell II M bottle flowpath, bacteria can degrade the components of ProCell II M resulting in a reduced ECL signal generating capacity. The impact of this degradation is described for sandwich and competitive assays, as follows:

- **Sandwich assays:**

The issue might lead to incorrect low signals and data alarms "Abnormal Low Signal (345-000001)" and "Signal low (<SigL)" may be issued. These alarms indicate a technical issue with the measurement. Also incorrect results without flag and alarm might be generated. If no alarm and/or flag, which invalidates the result, occurs and if the incorrect result is believed to be correct with an unpredictable deviation, a medical risk cannot be excluded.

Elecsys ACTH	Elecsys Active B12	Elecsys AFP	Elecsys AMH
Elecsys AMH Plus	Elecsys Anti-CCP	Elecsys Anti-HAV IgM	Elecsys Anti-HBc IgM
Elecsys Anti-HBs II	Elecsys Anti-HCV II	Elecsys BRAHMS PCT	Elecsys CA 125 II
Elecsys CA 15-3 II	Elecsys CA 19-9	Elecsys CA 72-4	Elecsys Calcitonin
Elecsys CEA	Elecsys Chagas	Elecsys CK-MB	Elecsys CMV IgG
Elecsys CMV IgG Avidity	Elecsys CMV IgM	Elecsys C-Peptide	Elecsys CYFRA 21-1
Elecsys Ferritin	Elecsys free PSA	Elecsys free βhCG	Elecsys FSH
Elecsys GDF-15	Elecsys HBeAg	Elecsys HBsAg II	Elecsys HBsAg II quant II
Elecsys HCG STAT	Elecsys HCG+β	Elecsys HE4	Elecsys hGH
Elecsys HIV Duo	Elecsys HSV-1 IgG	Elecsys HSV-2 IgG	Elecsys HTLV-I/II
Elecsys IgE II	Elecsys IGFBP-3	Elecsys IL-6	Elecsys Insulin
Elecsys LH	Elecsys Myoglobin	Elecsys N-MID Osteocalcin	Elecsys NSE
Elecsys PAPP-A	Elecsys PlGF	Elecsys proBNP II	Elecsys ProGRP
Elecsys Prolactin II	Elecsys PTH	Elecsys PTH (1-84)	Elecsys Rubella IgG
Elecsys Rubella IgM	Elecsys S100	Elecsys SCC	Elecsys sFlt-1
Elecsys SHBG	Elecsys Syphilis	Elecsys Tg II	Elecsys total P1NP
Elecsys total PSA	Elecsys Toxo IgG	Elecsys Toxo IgG Avidity	Elecsys Toxo IgM
Elecsys Troponin I	Elecsys Troponin T hs	Elecsys TSH	Elecsys β-CrossLaps/serum

Table 1 - Sandwich assays that may present abnormal low results

- **Competitive assays:**

The flag ">Test" for competitive tests may be generated, however incorrect results without flag and alarm might be generated as well. If no alarm and/or flag, which invalidates the result, occurs and if the incorrect result is believed to be correct with an unpredictable deviation, a medical risk cannot be excluded.

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Elecsys Anti-HAV	Elecsys Anti-HBc II	Elecsys Anti-HBe	Elecsys Anti-Tg
Elecsys Anti-TPO	Elecsys Anti-TSHR	Elecsys Cortisol II	Elecsys Cyclosporine
Elecsys DHEA-S	Elecsys Digitoxin	Elecsys Digoxin	Elecsys Estradiol III
Elecsys Everolimus	Elecsys Folate	Elecsys FT3 III	Elecsys FT4 II
Elecsys Progesterone III	Elecsys Sirolimus	Elecsys T3	Elecsys T4
Elecsys Tacrolimus	Elecsys Testosterone II	Elecsys T-Uptake	Elecsys Vitamin B12 II
Elecsys Vitamin D total II			

Table 2 – Competitive assays that may present incorrect <u>high results</u>

Actions taken by Roche Diagnostics

1. <u>ProCell II M improvement:</u>
   a. An updated ProCell II M with improved preservation will be available at Roche global warehouse from calendar week 12/2019 (March 18th to 22nd) onwards. Tests revealed that this updated ProCell II M remains stable even after contamination with the same kind of bacteria as described under "**Important Information**".
   b. All customers will be contacted by Roche representatives to proactively schedule a visit to switch **cobas e** 801 modules/analytical units to the updated ProCell II M.

2. <u>ProCell II M flowpath decontamination:</u>
   a. Until the updated ProCell II M is available at customer sites, a decontamination of the ProCell II M flowpath every 4 weeks should be performed by a Roche representative, for **cobas e** 801 modules/analytical units that show at least <u>two</u> of the following conditions:
      - Bacterial contamination of the flowpath or other signs of contamination
      - [Finalization] is not daily performed
      - Occurrence of alarms for "*ProCell On Board Stability Time (744-xxxxxx or 346-xxxxxx)*"
      - Reoccurrence of alarms for "*Abnormal Signal Low (345-000001)*"
      - The system is operated in CLAS connection mode or rack reception mode > 8h
   b. In order to improve the efficiency of the ProCell II M flowpath decontamination procedure, the related service procedure has been revised and proven to mitigate the risk of contamination.

Actions to be taken by the customer/user

The actions described below under "Short-term workaround" are only limited to the potentially affected **cobas e 801** modules/analytical units that show at least <u>two</u> of the following conditions:
- Bacterial contamination of the flowpath or other signs of contamination
- [Finalization] is not daily performed
- Occurrence of alarms for "*ProCell On Board Stability Time (744-xxxxxx or 346-xxxxxx)*"
- Reoccurrence of alarms for "*Abnormal Signal Low (345-000001)*"
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Short-term workaround

If you have a potentially affected **cobas e** 801 module/analytical unit (based on the above described criteria), then please perform the below instructions only until the decontamination is performed by a Roche FSR or the updated ProCell II M is available for routine operation:

- **During <u>operation</u>:**
  - Every <u>4 hours</u>, mask and unmask the affected **cobas e** 801 module/analytical unit.
  - This procedure exchanges the ProCell II M inside the flowpath of both bottles and avoids the issue to occur.
- **After idle periods exceeding 4 hours without performing measurements in rack reception mode / CLAS connection mode, <u>before</u> restarting measurements:**
  - Mask and unmask the affected **cobas e** 801 module/analytical unit.
  - This procedure exchanges the ProCell II M inside the flowpath of both bottles and avoids the issue to occur after longer idle periods.

How to mask and unmask a **cobas e** 801 module/analytical unit:
- Choose the [Start] global button, then press [Masking], then press [Module Masking], press repeatedly the **cobas e** 801 [AU] button until <u>Module Mask</u> is displayed and press [Execute].
- Wait until the masking process is complete, then repeat the procedure to unmask the same module/ analytical unit and bring it back to Operation.

Long-term solution

Contact Roche to change to the updated ProCell II M, available at Roche global warehouse from calendar week 12/2019 (March 18th to 22nd) onwards, with support from a Roche FSR.

How to retrospectively identify and correct potentially affected patient sample results

<u>Affected</u> **cobas e** 801 modules/analytical units may generate discrepant results as follows:
- 15 to 35 measurements after generation of alarm 343-00009 or 343-00010 (ProCell II M bottle changeover)
- 15 to 35 measurements after restarting operation without any measurements for more than 4 hours in rack reception mode

If you have a potentially affected **cobas e** 801 module/analytical unit the following steps may be used to retrospectively identify and correct potentially discrepant results:

1. Rerun the 15th to 35th consecutive measurements after the above mentioned conditions occurred to detect and correct affected results.

2. Follow the "Short-term workaround" or "Long-term solution" to avoid the reoccurrence of this issue.

If you have any questions, please contact your local Roche Customer Support.

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Communication of this Field Safety Notice (if appropriate)

This notice must be passed on to all those who need to be aware within your organization or to any organization/individual where the potentially affected devices have been distributed/supplied. (If appropriate)

Please transfer this notice to other organizations/individuals on which this action has an impact. (If appropriate)

Please maintain awareness of this notice and resulting action for an appropriate period to ensure the effectiveness of the corrective action. (If appropriate)

The following statement is mandatory in FSNs for EEA countries but is not required for the rest of the World:

Include if applicable: The undersigned confirms that this notice has been notified to the appropriate Regulatory Agency.

We apologize for any inconvenience this may cause and hope for your understanding and your support.

Best regards,

Contact Details

To be completed locally:
Name
Title
Company Name
Address
Tel. +xx-xxx-xxxx xxxx
Email name@roche.com