

QuarterPRO FAQs

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HOW CAN I generate a Mastitis Pattern Report?

A Mastitis Pattern Report is generated from a CDL file (milk recording file) AUTOMATICALLY either by the farmer signing up at <https://cloud.remedy.farm/mpat> or in the TotalVet program.

The CDL file contains all the information available from a milk recording organisation, in a standard format (“common data layer”). This contains the “herd structure” information including cow ID’s, calving dates, parity etc as well as individual cow cell counts and milk composition data, if recorded. It MAY include clinical mastitis data, but not necessarily.

CAN I STILL USE THE CDL CONVERTER AND OLD EXCEL-BASED MASTITIS PATTERN ANALYSIS TOOL?

The CDL converter has been discontinued as it is no longer necessary for generating a Mastitis Pattern Report. “Old style” pattern analysis can still be generated in the old version of TotalVet but this is soon being phased out. The new automatically generated Mastitis Pattern Reports and New TotalVet are based on improved algorithms and these are the reports you are encouraged to use. The improvements mean that there may occasionally be discrepancies between the old and new style reports created from the same data set.

CAN the Mastitis Pattern Analysis Report be generated using only clinical mastitis data (without individual cow SCC data)?

No, the new Report requires individual cow SCC data.

CAN the Mastitis Pattern Analysis Report be generated using only individual cow SCC data (without clinical mastitis data)?

A Report can be generated, but with a strong warning about data quality. For robust analysis farmers should share clinical mastitis with their milk recording organisation (MRO) – see below.

WHAT IF the farm has infrequent individual cow SCC records?

If there are less than two recordings in a 3-month period, the data quality section of the Pattern Tool will give a red warning and the pattern analysis will be less robust.

If the herd calves seasonally and individual cow recordings are only made to inform drying off, the Pattern Analysis report will be less robust

Be cautious when interpreting apparent ‘Contagious’ patterns in herds with irregular milk recording data.

WHAT IF the farm has no clinical mastitis records at all?

Farmers should be reminded that they have a legal obligation to record mastitis treatments. They are also likely to have a requirement to record all mastitis cases as part of a Farm Assurance Scheme.

It should be part of the milk recording service to collate and incorporate any mastitis data that is provided by the farmer. A spreadsheet of clinical cases can be created from treatment records and this can be shared with the milk recording organisation. Contact the MRO for details of the format.



If the farmer is not recording any clinical mastitis event data, the Pattern Analysis Report will be less robust, particularly in low cell count herds. Try to understand any pitfalls resulting from data quality. Seek experienced advice to make manual analysis of the data that is available.

Instigate recording of clinical cases, at least on paper: cow, date and days in milk.

If you do not have enough data to generate the Pattern Analysis Report here is a rule of thumb to start off with:

As a start, follow the next 12 cows to calve. If more than one of them has a case of clinical mastitis in the first 30 days of lactation, there is likely to be an issue with the dry period.

WHAT IF the farm only has clinical mastitis records on paper? (but has electronic milk recording information)

Collate the clinical data for the last 18 months in Excel using the template at <https://www.total-vet.co.uk/useful-documents>, (Mastitis.csv), save as csv file. Forward this to the MRO, or merge with the CDL or with other farm software using TotalVet.

WHAT IF the farm has clinical mastitis data in farm software but not in the milk recording CDL?

Contact the manufacturer of your on-farm software to find out how to export mastitis data in the format indicated by the template at <https://www.total-vet.co.uk/useful-documents>, (Mastitis.csv)

This data can then be incorporated by the MRO, or merged with the CDL in TotalVet.

WHAT IF the farm uses robots that record cell count?

It is not possible to extract “Cell Count” data from robotic milking systems for use in the pattern tool. A CDL from a milk recording organisation is required. Robot “Cell Count” data is not accurate enough for predicting new infections around the 200,000 cells/ml threshold.

WHAT IF the Mastitis Pattern Analysis Report suggests a “mixed pattern”

Choose one area to concentrate on **first (either EL, EDP or C)**.

Think about -

- Where the most immediate gains can be made



- Time of year - is there seasonality in either the dry cow problems or the lactation problems?
- Seasonality of calving - will changes to the dry cow environment at present be effective?
- Nature of the problem - is this a cell count issue or a clinical mastitis issue? Which group is likely to influence the main problem most? (may require more detailed data analysis)
- If there are severe or toxic cases, are these arising specifically in dry period or lactation? Tackle the relevant area first.
- Dry cow interventions often yield the most immediate returns, if it is the appropriate time of year to make them.
- Contagious issues might seem easy to tackle, but may require a complete change of mindset in the parlour.
- Contagious issues can escalate rapidly in the absence of Antibiotic Dry Cow Therapy.

WHAT IF my initial judgement disagrees with the Pattern Analysis Report?

Validation during development of the New Pattern Analysis Tool (which generates the New Pattern Analysis Report) demonstrated that the Tool reached the same conclusion as a Veterinary Expert for 99% of herds when identifying a contagious issue as opposed to environmental issues, and for 78% of herds when identifying environmental dry period issues as opposed to environmental lactation issues. (Hyde et al (2020) <https://www.nature.com/articles/s41598-020-61126-8>.)

In early testing, disagreement was most often associated with poor data quality, particularly lack of clinical data, or a “mixed pattern”.

Remember the Report is based on historic data, taking into account the previous 18 months. You may be aware of more immediately emerging situations.

If you disagree with the pattern in the Report, more detailed analysis of the farm data is recommended.



WHAT IF a more detailed investigation is required to pinpoint relevant interventions?

Find a trained Plan Deliverer to carry out the full Mastitis Control Plan

<https://www.mastitiscontrolplan.co.uk/>

WHAT IF no progress is being made after several runs of QuarterPRO?

Find a trained Plan Deliverer to carry out the full Mastitis Control Plan

<https://www.mastitiscontrolplan.co.uk/>

REMIND ME of the sequence of steps through the QuarterPRO process

SUMMARY - What are we trying to do?

- Work out **when** infections are predominantly happening
 - Dry period or Lactation
- Work out **where** infection are predominantly coming from
 - Cow-to-cow or Environment
- Identify the key risk factors
- Work out what can be done to reduce these risks
- Make changes...
- Review every 3 months
- Signpost to full Mastitis Control Plan when more detail is needed

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