

Council on Dairy Cattle Breeding
Quick turnaround evaluations service

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What is the quick turnaround service about?

- Evaluation service only (PTA and approx. REL only)
 - No haplotypes/BBR/PV/some traits (health/RFI/etc).
- Limited number of traits (max. 15; see policy for full list).
- Females only
- Snapshot evaluation
- Ultra-fast (< 5 mins from posting of genotypes)
- No ID required, no pedigree, very limited QC

Main target

- Commercial herds with limited information on pedigrees
- Selection and culling tool for young female calves
- Mostly international markets

How to access this service?

- Request to access (\$1000 setup cost)
 - Chip to be used (+30k for good results)
 - Traits to receive evaluations for
 - Preference in terms of input/output (typically, the same as in “full service”)
 - End User Agreement signature
- CDCB sets up the system for all breeds (+ documentation for the user)
 - Solutions updated each triannual run
- Testing phase (no charge)
- Production phase

Some important differences with “Full service”

- Other than the ones already mentioned:
 - Genotypes **not stored in CDCB database** (*no queries*)
 - Limited genotype file storage
 - Separate folder (*to avoid confusion*)
 - Completely automated system (*independent from “freezes” or routine maintenance to the database*)

COMPARISON BETWEEN CDCB WEEKLY AND PROPOSED QUICK TURNAROUND GENOMIC PREDICTIONS

Feature	Weekly Genomic Prediction	Quick Turnaround Genomic Predictions
Frequency of evaluation	Once a week	Automated genotype processing in minutes
GPTA estimates	All traits	15 selected traits
Breeds	AYR, BSW, GUE, HOL, JER	AYR, BSW, GUE, HOL, JER
Sample ID	Required	Required
Unique animal ID	Required	Not required
Pedigrees	Required	Not required
All validated SNP chips	Accepted	Accepted
Males	YES	NO
Crossbreds	YES	NO
Health resistance traits	YES	NO
Breed Base Representation (BBR)	YES (Distributed monthly)	NO
Recessive haplotypes	YES	NO
Parentage verification	YES	NO
Parentage discovery	YES	NO
Periodical updates	Monthly	NO
Results shared with PDCA	YES	NO
Results shared with DRPC	YES	NO

Documentation and costs

- Policy available here:

<https://redmine.uscdcb.com/attachments/download/8994/CDCB%20quick%20turnaround%20predictions%20policy%20proposal.pdf>

- User-specific documentation provided to the user during setup
- Cost of evaluations: \$1 per animal
 - If valid ID17 provided, animals can obtain discount when requesting “full service”

QUESTIONS? NEED OF MORE INFO?

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