

NSQAP Proficiency Testing Program List

PROFICIENCY TESTING PROGRAMS	ANALYTE(S) INCLUDED
Acylcarnitines (ACPT)	Low Free Carnitine (C0(L)), Low Acetylcarnitine (C2(L)), Propionylcarnitine (C3), Malonylcarnitine [derivatized] (C3DC), Malonylcarnitine + Hydroxybutyrylcarnitine [non-derivatized] (C3DC+C4OH), Butyrylcarnitine (C4), Hydroxybutyrylcarnitine [derivatized] (C4OH), Isovalerylcarnitine (C5), Tiglylcarnitine (C5:1), Glutarylcarnitine (C5DC), Hydroxyisovalerylcarnitine (C5OH), Hexanoylcarnitine (C6), Octanoylcarnitine(C8), Decanoylcarnitine (C10), Decenoylcarnitine (C10:1), Decadienoylcarnitine (C10:2), Myristoylcarnitine (C14), Tetradecenoylcarnitine (C14:1), Palmitoylcarnitine (C16), Hydroxypalmitoylcarnitine (C16OH), Stearoylcarnitine (C18), Oleoylcarnitine (C18:1), Hydroxystearoylcarnitine (C18OH)
Adrenoleukodystrophy (ALDPT)	C24:0-lysophosphatidylcholine (24:0-LPC), C26:0-lysophosphatidylcholine (26:0-LPC)
Amino Acids and SUAC (AAPT)	Arginine (Arg), Citrulline (Cit), Creatine (Cre), Guanidinoacetic acid (GUAC), Guanidinoacetate N-methyltransferase (GAMT) Ratio, Leucine (Leu), Methionine (Met), Phenylalanine (Phe), Succinylacetone (SUAC), Tyrosine (Tyr), Valine (Val)
Biotinidase Deficiency (BIOTPT)	Biotinidase (BIOT)
Cystic Fibrosis DNA Variant Detection (CFDNA)	Cystic Fibrosis DNA Variants
Galactose-1-phosphate Uridyltransferase Deficiency (GALTPT)	Galactose-1-phosphate Uridyltransferase (GALT)
Glucose-6-phosphate Dehydrogenase Deficiency (G6PDPT)	Glucose-6-phosphate Dehydrogenase (G6PD)
anti-HIV-1 Antibodies (HIVPT)	anti-HIV-1 Antibodies
Hormone + Total Galactose (HORMPT)	Thyroxine (T4), Thyroid Stimulating Hormone (TSH), 17 α -Hydroxyprogesterone (17OHP), and Total Galactose (TGal)
Immunoreactive Trypsinogen (IRTPT)	Immunoreactive Trypsinogen (IRT)
Lysosomal Storage Disorders (LSDPT)	Galactoceramidase (GALC), Acid α -Glucosidase (GAA), α -L-Iduronidase (IDUA), α -Galactosidase (GLA), β -Glucocerebrosidase (GBA), Acid Sphingomyelinase (ASM), Iduronate-2-Sulfatase (I2S)
Second-tier Congenital Adrenal Hyperplasia (CAHPT) by LC-MS/MS	17 α -Hydroxyprogesterone (17OHP), 4-Androstenedione (4AD), Cortisol (Cort), 11-Deoxycortisol (11D), 21-Deoxycortisol (21D)
Sickle Cell Disease and Other Hemoglobinopathies (HbPT)	Sickle Cell Disease (SCD) and Other Hemoglobinopathies
Spinal Muscular Atrophy (SMAPT)	Survival Motor Neuron 1 (SMN1) Exon 7
T-cell Receptor Excision Circle (TRECPT)	T-cell Receptor Excision Circle (TREC)
anti-Toxoplasma Antibodies (TOXOPT)	<i>Toxoplasma gondii</i> IgM Antibodies (TOXO)
Duchenne Muscular Dystrophy (DMDPT)'	Creatine kinase MM (CK-MM)
Psychosine (PSYPT)*	Psychosine (PSY)
2nd Tier Materials (2TMPT)*	GAMT ratio (GUAC/CRE)*1000, Alloisoleucine (A-ILE), Malonylcarnitine (C3DC), Creatine (CRE), Ethylmalonic Acid (EMA), Guanidinoacetic Acid (GUAC), Isoleucine (ILE), Leucine (LEU), C24:0-lysophosphatidylcholine (LPC 24:0), C26:0-lysophosphatidylcholine (LPC 26:0), 2-Methylcitric Acid (2-MCA), Methylmalonic Acid (MMA), Total Homocysteine (tHCY), Valine (VAL)

NSQAP Quality Control Program List

QUALITY CONTROL PROGRAMS	ANALYTE(S) INCLUDED
17 α-Hydroxyprogesterone + Total Galactose (17OHPQC and TGalQC)	17 α -Hydroxyprogesterone (17OHP) and Total Galactose (T-Gal)
Cystic Fibrosis DNA Variant Detection (CFDNAQC)¹	QC specimens collectively contain 35 of the 39 <i>CFTR</i> pathogenic variants included in the Luminex xTAG Cystic Fibrosis 39 kit v2. In addition, one specimen contains a pathogenic variant detected by the Luminex xTAG 60 v2 kit, and two specimens contain a pathogenic variant detectable using a sequencing method.
Galactose-1-phosphate Uridyltransferase (GALTQC)	Galactose-1-phosphate Uridyltransferase (GALT)
anti-HIV-1 Antibodies (HIVQC)	anti-HIV-1 Antibodies
Immunoreactive Trypsinogen (IRTQC)	Immunoreactive Trypsinogen (IRT)
Lysosomal Storage Disorders (LSDQC)	Galactoceramidease (GALC), Acid α -Glucosidase (GAA), α -L-Iduronidase (IDUA), α -Galactosidase (GLA), β -Glucocerebrosidase (GBA), Acid Sphingomyelinase (ASM), Iduronate-2-Sulfatase (I2S)
Tandem MS 1 (MSMS1QC)	Arginine (ARG), Alanine (ALA), Citrulline (CIT), Creatine (CRE), Creatinine (CRN), Guanidinoacetic Acid (GUAC), Glycine (GLY), Leucine (LEU), Methionine (MET), Ornithine (ORN), Phenylalanine (PHE), Succinylacetone (SUAC), Tyrosine (TYR), Valine (VAL), C0, C2, C3, C3DC, C3DC+C4OH, C4, C4OH, C5, C5:1, C5DC, C5OH, C6, C8, C10, C12, C14, C14:1, C16, C16OH, C18, C18OH, C20-LPC, C22-LPC, C24-LPC, C26-LPC, Adenosine (ADO), Deoxyadenosine (dADO)
Thyroxine (T4QC)	Thyroxine (T4)
Thyroid-Stimulating Hormone (TSHQC)	Thyroid Stimulating Hormone (TSH)
Duchenne Muscular Dystrophy (DMDQC)²	Creatine Kinase MM (CK-MM)
Spinal Muscular Atrophy -T-cell Receptor Excision Circle (SMA-TRECQC)²	Survival Motor Neuron 1 (SMA) Exon 7, T-cell Receptor Excision Circle (TREC)

SECOND-TIER QUALITY CONTROL PROGRAMS Two events per year	ANALYTE(S) INCLUDED
Second-tier Congenital Adrenal Hyperplasia by LC-MS/MS (CAHQQC)	17 α -Hydroxyprogesterone (17OHP), 4-Androstenedione (2AD), Cortisol (Cort), 11-Deoxycortisol (11D), 21- Deoxycortisol (21D)
Psychosine (PSYQC)*	Psychosine (PSY)
Second-tier Tier Materials (2TMQC)*	GAMT ratio (GUAC/CRE)*1000, Alloisoleucine (A-ILE), Malonylcarnitine (C3DC), Hydroxybutyrylcarnitine(C4OH), Creatine (CRE), Creatinine (CRN), Ethylmalonic Acid (EMA), Guanidinoacetic Acid (GUAC), Isoleucine (ILE), Leucine (LEU), C20:0-lysophosphatidylcholine (20:0-LPC), C22:0-lysophosphatidylcholine (22:0- LPC), C24:0-lysophosphatidylcholine (24:0-LPC), C26:0-lysophosphatidylcholine (26:0- LPC), 2-Methylcitric Acid (2MA), Methylmalonic Acid (MMA), Total Homocysteine(tHCY), Valine (VAL)

¹*New Program(s) Available for Domestic and International Laboratories in Q1 2026*

²*New Program(s) Available for Domestic Laboratories in Q1 2026*