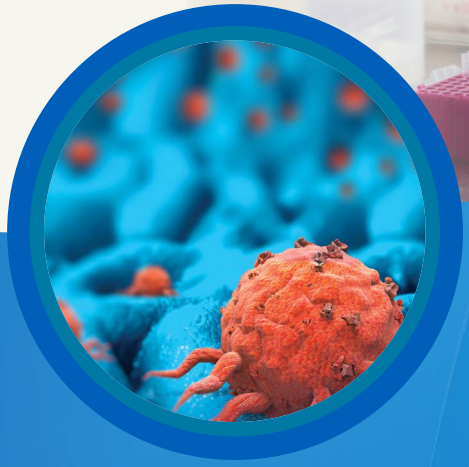
Ipsum DIAGNOSTICS



STATE-OF-THE-ART

Anatomical and Clinical Pathology Laboratory

Ipsum Diagnostics is a national reference laboratory providing an exceptional depth of anatomical and clinical testing services. Our Anatomical Division includes Bone Pathology, Neuropathology, Histopathology and Dermatopathology. Ipsum's Clinical Molecular Diagnostics Division provides unparalleled interpretation of polymicrobial infections. With specialist consultation by infectious disease physicians, pathologists and molecular biologists, each case is personalized for rapid, optimal and cost-effective patient care.

Ipsum Diagnostics
8607 Roberts Drive
Suite 250
Atlanta, GA 30350
678.915.2299 Laboratory
844.364.8451 Fax
www.ipsumdiagnostics.com

Anatomic Pathology

Ipsum Diagnostics is an accredited, full-service Histology Laboratory with board-certified physicians in Anatomic Pathology and Dermatopathology. The division combines state-of-the-art technology with highly skilled personnel to deliver expert diagnoses.

The following are offered with routine histopathology as well as a comprehensive selection of specialty tests including immunohistochemical (IHC) markers and immunofluorescense:

-Neuropathology: neoplasms, amyloid deposition diseases and neuropathies including proprietary testing for Small Fiber Neuropathy (SFN) with Epidermal Nerve Fiber Density (ENFD)

-Dermatopathology: hair, skin and nails ranging from neoplasms and infections to inflammatory and autoimmune disease with the ability to perform in house direct(DIF) and indirect immunofluorescence (IIF)

-Bone Pathology: osteomyelitis, metabolic and inflammatory disease and neoplasms

-Gastrointestinal Pathology: inflammatory and infectious diseases and neoplasms

Our goal is to provide results within 72 hours while maintaining superior diagnostic quality and accuracy so you can provide your patients with the best care.For complex cases, Ipsum offers consultations with our team of medical specialists to help you improve patient outcomes and prevent unnecessary delays that could impact your patients

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PATENT PENDING SOFTWARE:
KEY TO A MORE EFFICIENT PROCESS

Ipsum Diagnostics is a pathology laboratory providing cutting edge testing with high-tech solutions. Each aspect of the testing performed has been scrutinized and re-designed to optimize quality and efficiency for our clients. We have leveraged our proprietary software engine to design unique systems for:

- Ordering & collections - including our Patient Identification Labeling Kit and Advanced Bar Code Tracking System
- Analysis
- Laboratory Information
- Data Management
- Precision Medication
- Reporting

These systems simplify and shorten the collection process increasing the accuracy and precision of sample collection. They make the process more efficient, reducing time from collections to analysis to results. We use a comprehensive approach to reporting that can encompass different specimen types and/or testing methodologies to provide a global view of the condition and improve diagnostic accuracy. Our system culminates in multidisciplinary review by physicians with diverse expertise, that seamlessly collaborate to provide a clear concise and accurate diagnostic tool.

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MOLECULAR DIAGNOSTICS & SPECIALISTS REVIEW:
HELPING CUT COSTS

Ipsum's molecular testing for pathogen detection (urine, bone, skin, aspirate, swab, etc.) includes two levels of experts reporting cases. With the first layer, Polymerase Chain Reaction (PCR) data is reviewed and approved by a Molecular Biologist (ASCP Certified). After this data review is complete, a board certified infectious disease physician performs the final report review and approval. This second layer of professional evaluation offers a higher level of quality in actionable information. The infectious disease physician discriminates the pathogen versus the organisms that are colonizers and/or contaminants (i.e., would not require treatment). The patient's clinical information such as medication allergies, health conditions (pregnancy, renal disease, etc.) are reviewed and treatment considerations provided by the infectious disease doctor is truly "precision" medicine.

We also offer infectious disease consultation to our providers, this is a service included with the molecular PCR pathogen detection, to ensure the highest quality of patient care without adding cost for patients or insurance companies.

This unique process aids in proper, timely treatments that speed healing time, reduce additional provider visits and prevents unnecessary medications that could lead to resistance.

PCR vs traditional wound culture:
PCR is superior to traditional wound culture because it is faster (results within 24 hours vs days to weeks), more sensitive and less prone to cross contamination. Testing for both bacterial and fungal pathogens is done with a single swab.

PCR vs Urine dipstick:
Urine dipsticks are quick and easy for point-of-care testing but do not provide microbiological diagnosis.
Urine dipsticks can give false-negative results with non-nitrite producing pathogens such as Enterococcus and Staphylococcus spp, making them less sensitive in screening for UTIs in the elderly and pregnant patients who have higher rates of gram positive infections.

PCR vs Standard 24 hour urine cultures:
Urine cultures fail to spot a high proportion of uropathogens that may be clinically relevant, especially gram positives and fungal pathogens (12% detection rate of non-E. coli pathogens). Expanded Quantitative Urine Culture (EQUC) method identifies more pathogens but takes 48 hours of growth time. If a pathogen is isolated and identified with culture, antimicrobial susceptibility testing takes an additional 1-2 days.

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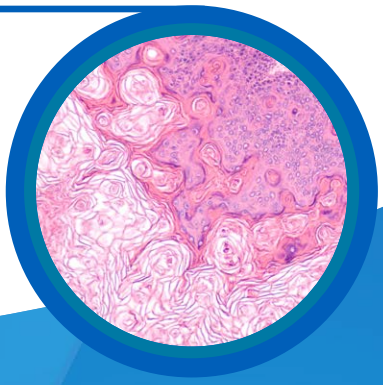
PROPRIETARY TESTING SERVICES:
EPIDERMAL NERVE FIBER DENSITY



Small Fiber Neuropathy is often an undiagnosed disease, and the only way to DEFINITIVELY diagnose it is by taking a skin biopsy and performing Epidermal Nerve Fiber Density (ENFD) testing. Diagnosis can be extremely helpful in determining which treatment option is best for a particular patient. Early detection can also be important as detection of reduced small nerve fiber density can predict the progression to a larger-spread neuropathy. An ENFD test can reduce overall healthcare costs, unnecessary surgeries, unnecessary treatments and improve patient care. Once diagnosed and treated, ENFD testing can be utilized to evaluate that course of treatment for patient improvement, and can be adjusted accordingly if necessary. Standard tests for nerve damage such as electromyograms and nerve conduction studies (EMG and NCS) are gross measures of large nerves, but they cannot give the appropriate information on the health of small sensory nerve fibers.

Our proprietary test for Epidermal Nerve Fiber Density (ENFD-IHC) provides an objective diagnosis for small fiber neuropathy. The method requires the highest-level technical skill-set, knowledge, and expertise from laboratorians and pathologists alike. This test is not commercially available because of the unique requirements that can be difficult to implement in a routine laboratory's workflow. Our talented team of experts developed a method with improved quality, accuracy and turn-around-time.

Ipsum's proprietary method for ENFD testing was developed using H&E as the background stain, not immunohistochemical (IHC) background stain regularly implemented by other laboratories. Tissue sections are examined for more than just the small nerve fibers. The H&E background better discriminates other abnormalities such as inflammatory cells, vasculitis or a subtle tumor. This comprehensive evaluation ensures the physician has the most information to treat the Small Fiber Neuropathy and any underlying cause. If an abnormality of concern is identified, this can be reported and communicated to the physician. The method developed improves our turn-around-time and does not require additional CPT codes

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Procedure Codes

Ipsum Diagnostics is dedicated to offering superior testing services while minimizing costs to both your network and members. Our out-of-network status severely limits access to the highest quality affordable testing and quick turnaround time. We are working to obtain in-network status that will ensure your members have cost effective access to our specialized testing services. Ipsum would be honored to become an in-network provider that offers unique diagnostic tests that otherwise have very limited availability. We are committed to ensuring that your members receive the most exceptional services while minimizing the financial impact on your network and members.

ENFD- Epidermal Nerve Fiber Density

Procedure Code	Procedure - CPT - Description
88305	Level IV - surgical pathology, gross &microscopic exam
88313	Special stains grp 2, all other, each
88314	Special stains histochemical stain w/frozen section
88342	Imhistochem/cytchm init antibody stain procedure
88356	Morphometric analysis; nerve

HISTOPATHOLOGY

Procedure Code	Procedure - CPT - Description
88305	Level IV - surgical pathology, gross &microscopic exam
88312	Special stain including interpretation and report; Group I for microorganisms (eg, acid fast, methenamine silver)
88304	Level III Tissue Exam By Pathologist
88312	Special Stains Group 1
88313	Special Stains Group 2
88311	Decalcify Tissue
88341	Immunohistochemical antibody additional stain

MOLECULAR - PCR

Procedure Code	Procedure - CPT - Description
87640	Infectious agent detection by nucleic acid (DNA or RNA); Staphylococcus aureus, amplified probe technique
87650	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group A, direct probe technique
87653	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group B, amplified probe technique
87651	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group A, amplified probe technique
87481	Infectious agent detection by nucleic acid (DNA or RNA); Candida species, amplified probe technique
87500	Infectious agent detection by nucleic acid (DNA or RNA); vancomycin resistance (eg, enterococcus species van A, van B), amplified probe technique
87798	Infectious agent detection by nucleic acid (DNA or RNA), not otherwise specified; amplified probe technique, each organism

MEDICAID AND LICENSING

Ipsum Diagnostics is proud to be enrolled in the follow State Medicaid Plans:

Alabama
Alaska
Arizona
Arkansas
California
Colorado
Florida
Georgia
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maryland
Michigan
Mississippi
Missouri
Montana
Nebraska
New Jersey
New Mexico
North Carolina
Ohio
Oregon
Pennsylvania
South Carolina
Tennessee
Texas
Utah
Virginia
Washington
West Virginia
Wisconsin

Clinical Laboratory Licensing

California	COS00800823
Florida	M17000001199
Georgia	060-403
Maryland	2698
Pennsylvania	35929

Laboratory Information:

Medical Director	Henry G Skelton
CLIA	11D2125186
CAP	8570236

INSURANCE COMPANIES

Ipsum Diagnostics is proud to be partnered with the following insurance companies:

AARP Supplemental
Absolute Total Care
Aetna Better Health of Louisiana
Aetna Better Health of Virginia
Alliant Health Plans
Allwell of Indiana
Ambetter of SC
Americas PPO
Anthem BCBS Georgia
AvMed
BCBS D.C.- Carefirst
BCBS Illinois
BCBS Maryland-Carefirst
BCBS Arizona
BCBS Texas
Beech Street
Careworks (Workers Compensation)
Buckeye Health Plan
Caresource of West Virginia
Caresource of Kentucky
Celtic Health Insurance of Illinois
ChampVA
Choice Care Network (Humana)
Community Health Choice Network
Comprehensive Medical and Dental Program (CMDP)
Core Source
Encore Health PPO
First Choice of the Midwest
GBA Railroad Medicare
Healthscope Benefits
Healthsmart Benefit Solutions (Humana Plans)
Humana
Humana Kentucky Medicaid
Magellan Complete Care of Virginia
Managed Health Services (MHS)
Medical Cost Containment Professionals
MediNcrease
Medicare
Meridian Health Plan of Illinois
Molina of OH
Molina of Texas
Multiplan
Oscar Health Plan (Multiplan)
Prime Health Services
Private Health Care Service (PHCS/Multiplan)
SummaCare
Three Rivers Network
Tricare East (Humana Military)
Tricare West (Health Net Federal Services-HNFS)
TriWest Healthcare Alliance
United Healthcare Community of NC
US Dept of Labor
Wellcare of Georgia

UTI: Molecular Assessment

PCR Testing for Bacteria, Fungi and Antibiotic Resistant Genes

Antibiotic Resistant Genes:

Quinolone and fluoroquinolone Resistance:
QnrA
QnrB

Vancomycin Resistance:
vanA1
vanB
vanC1

Carbapenem Resistance:
VIM
KPC
IMP-2 group
OXA-48

Macrolide Resistance:
ErmA
ErmB
ErmC

Methicillin Resistance:
MecA

Extended-Spectrum-Betalactamase:
SHV
CTX-M group 1

Fungi

Yeast
Candida albicans
Candida glabrata
Candida parapsilosis
Candida tropicalis
Candida aureus

Bacteria

Gram Negative
Acinetobacter baumannii
Providencia stuartii
Pseudomonas aeruginosa
Citrobacter freundii
Enterobacter aerogenes
Enterobacter cloacae
Escherichia coli
Klebsiella pneumoniae
Morganella morganii
Proteus mirabilis
Proteus vulgaris
Klebsiella oxytoca

Gram Positive
Enterococcus faecalis
Enterococcus faecium
Staphylococcus aureus
Staphylococcus epidermidis
Staphylococcus saprophyticus
Streptococcus agalactiae
(Group B)
Streptococcus pyogenes
Streptococcus pneumoniae

Anaerobic
Clostridium Perfringens
Peptostreptococcus anaerobius
Bacteroides fragilis
Fingoldia magna
(Peptostreptococcus magnus)

Molecular Microbiome Testing

PCR Testing for Bacteria, Fungi and Antibiotic Resistant Genes

Antibiotic Resistant Genes:

Quinolone and fluoroquinolone Resistance:
QnrA
QnrB

Vancomycin Resistance:
vanA1
vanB
vanC1

Carbapenem Resistance:
VIM
KPC
IMP-2 group
OXA-48

Macrolide Resistance:
ErmA
ErmB
ErmC

Methicillin Resistance:
MecA

Extended-Spectrum-Betalactamase:
SHV
CTX-M group 1

Wound/Bacteria Panel:

Fungi

Yeast
Candida albicans
Candida aureus
Candida glabrata
Candida parapsilosis
Candida tropicalis

Bacteria

Gram Negative
Acinetobacter baumannii
Providencia stuartii
Pseudomonas aeruginosa
Citrobacter freundii
Enterobacter aerogenes
Enterobacter cloacae
Escherichia coli
Klebsiella pneumoniae
Morganella morganii
Proteus mirabilis
Proteus vulgaris
Klebsiella oxytoca

Gram Positive
Enterococcus faecalis
Enterococcus faecium
Staphylococcus aureus
Staphylococcus epidermidis
Staphylococcus saprophyticus
Streptococcus agalactiae
(Group B)
Streptococcus pyogenes
Streptococcus pneumoniae

Anaerobic
Clostridium Perfringens
Peptostreptococcus anaerobius
Bacteroides fragilis
Fingoldia magna
(Peptostreptococcus magnus)

REV: 02|06|2020

Fungal PCR Panel

Yeast

Candida albicans
Candida aureus
Candida glabrata
Candida parapsilosis
Candida tropicalis
Geotrichum candidum
Pichia onychis

Nondermatophyte Mold

Acremonium strictum
Alternaria
Aspergillus fumigatus
Aspergillus niger
Aspergillus terreus
Aspergillus versicolor
Curvularia lunata
Fusarium solani
Neofusicoccum mangiferae
Scopulariopsis brevicaulis
Scytalidinum dimidiatum

Dermatophyte

Epidermophyton floccosum
Microsporum audouinii
Microsporum canis
Microsporum gypseum
Microsporum nanum
Trichophyton interdigitale (T. mentagrophytes)
Trichophyton rubrum
Trichophyton soudanense
Trichophyton tonsurans
Trichophyton violaceum
Trichosporon beigelii
Trichosporon mucoides

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