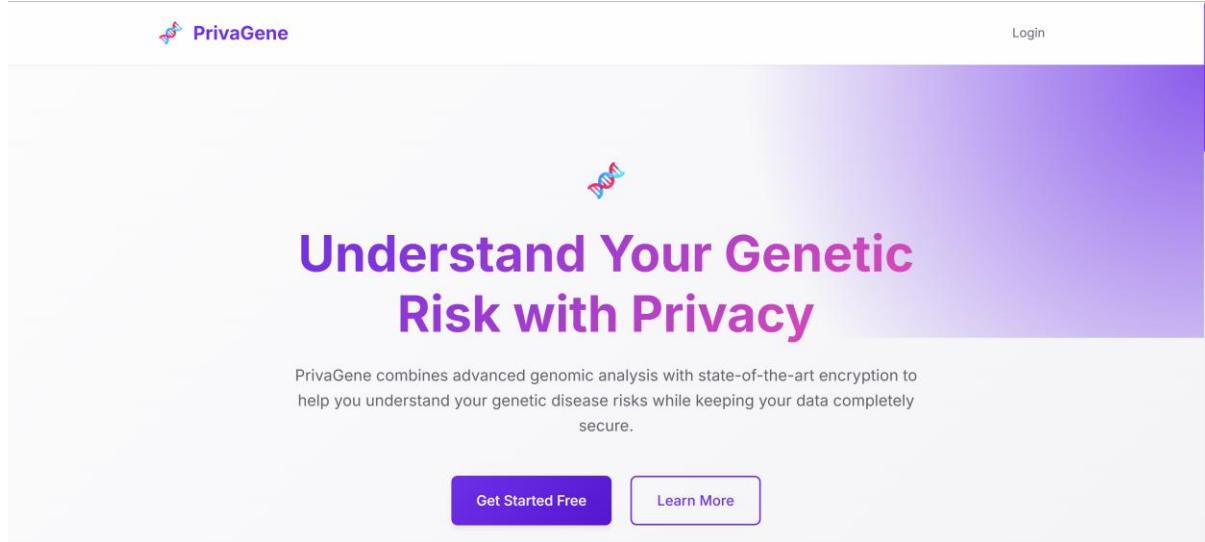


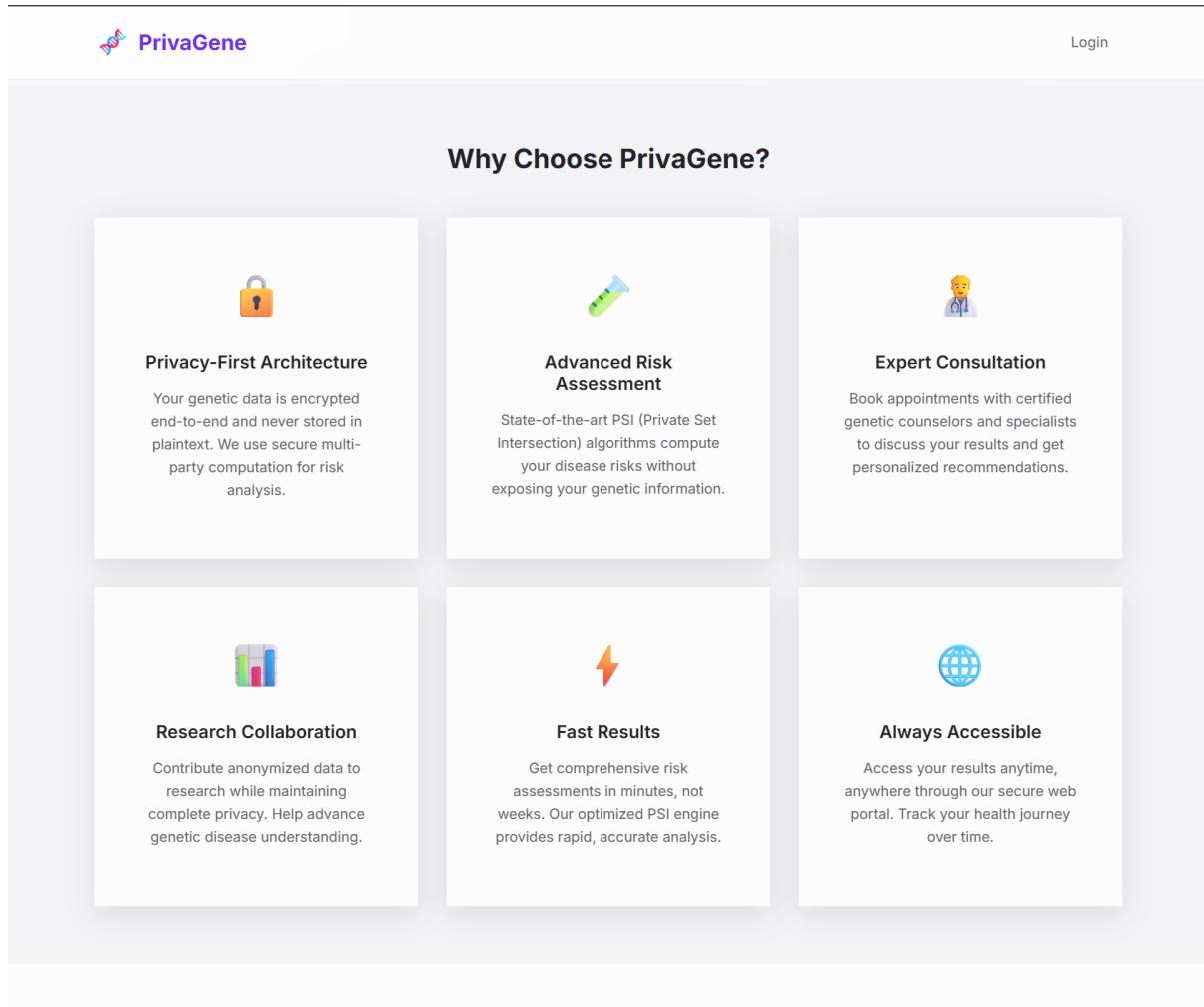
PrivaGene Webapp wireframes

Landing page:



The wireframe shows the PrivaGene landing page. At the top left is the PrivaGene logo with a DNA helix icon. At the top right is a 'Login' button. The main title 'Understand Your Genetic Risk with Privacy' is centered above a purple gradient bar. Below the title is a subtitle: 'PrivaGene combines advanced genomic analysis with state-of-the-art encryption to help you understand your genetic disease risks while keeping your data completely secure.' Two buttons are at the bottom: a purple 'Get Started Free' button and a white 'Learn More' button.

clicked on "Learn More" on landing page:



The wireframe shows the 'Why Choose PrivaGene?' page. At the top left is the PrivaGene logo. At the top right is a 'Login' button. The main heading 'Why Choose PrivaGene?' is centered above six cards arranged in a 2x3 grid. Each card has an icon and a title followed by a detailed description.

Icon	Title	Description
	Privacy-First Architecture	Your genetic data is encrypted end-to-end and never stored in plaintext. We use secure multi-party computation for risk analysis.
	Advanced Risk Assessment	State-of-the-art PSI (Private Set Intersection) algorithms compute your disease risks without exposing your genetic information.
	Expert Consultation	Book appointments with certified genetic counselors and specialists to discuss your results and get personalized recommendations.
	Research Collaboration	Contribute anonymized data to research while maintaining complete privacy. Help advance genetic disease understanding.
	Fast Results	Get comprehensive risk assessments in minutes, not weeks. Our optimized PSI engine provides rapid, accurate analysis.
	Always Accessible	Access your results anytime, anywhere through our secure web portal. Track your health journey over time.

Bottom of landing page:

The screenshot shows the bottom portion of the PrivaGene landing page. At the top right is a "Login" link. Below it is a section titled "Learn More About PrivaGene" with three buttons: "FAQ", "Terms of Service", and "Privacy Policy". Underneath are three rounded rectangular boxes with shadows. The first box contains the question "What is PSI Technology?", a brief description, and a "Learn more →" link. The second box contains the question "How secure is my data?", a brief description, and a "Learn more →" link. The third box contains the question "Can I book appointments?", a brief description, and a "Learn more →" link. At the very bottom of the page is a light gray footer bar with the copyright notice "© 2025 PrivaGene. Secure Genetic Risk Assessment Platform."

Login

The screenshot shows the login page. At the top center is a "Welcome Back" heading with a DNA helix icon above it. Below it is a "Sign in to access your PrivaGene account" link. The main form has two input fields: "Email Address *" containing "you@example.com" and "Password *" containing "Enter your password". There is also a "Remember me" checkbox and a "Forgot password?" link. A large purple "Sign In" button is at the bottom of the form. Below the form is a link "Don't have an account? [Sign up](#)".

Forgot password

The screenshot shows the "Forgot password" page. At the top center is a "Reset password" heading. Below it is a sub-instruction: "Enter the email associated with your account and we'll send reset instructions." There is a text input field labeled "Email" with a placeholder "" and a purple "Send reset instructions" button next to it. At the bottom right is a "← Back to Login" link.

Sign up



Choose Your Role

Select how you'll be using PrivaGene



Patient

Discover your genetic disease risk profile

- ✓ Upload genetic data securely
- ✓ Get disease risk assessments
- ✓ Book appointments with specialists
- ✓ View personalized recommendations

[Register as Patient](#)



Doctor

Provide genetic counseling and consultations

- ✓ Manage appointment schedule
- ✓ View patient appointments
- ✓ Provide genetic counseling
- ✓ Access patient results (authorized)

[Register as Doctor](#)



Hospital Admin

Manage organizational data and gene database

- ✓ Register organization
- ✓ Add gene database entries
- ✓ Manage gene information
- ✓ View organization statistics

[Register as Admin](#)



Researcher

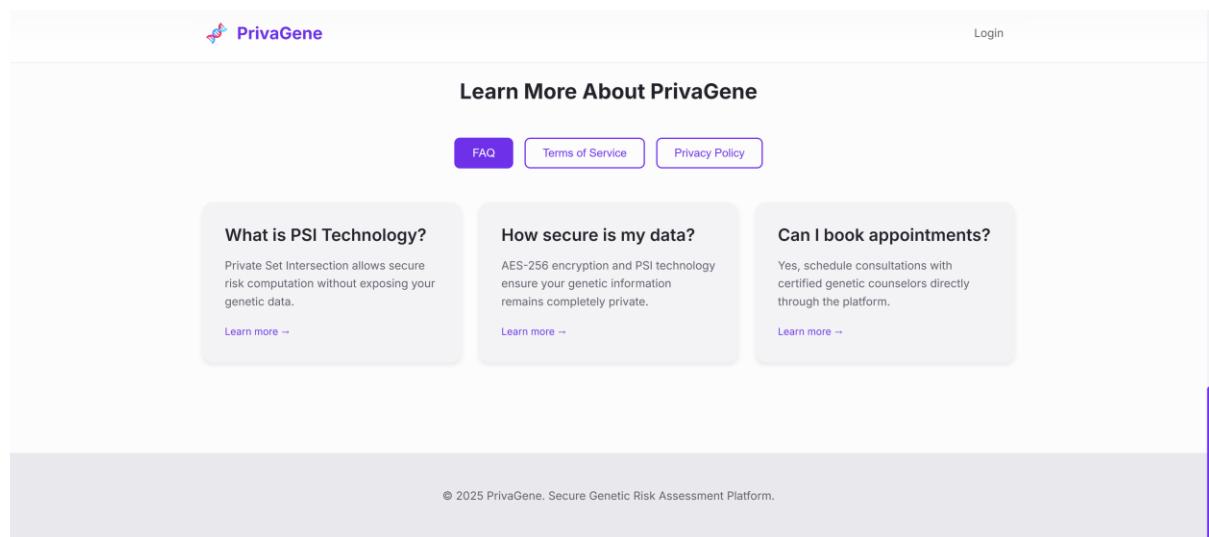
Access anonymized data for research

- ✓ View anonymized analytics
- ✓ Filter and query data
- ✓ Export research datasets
- ✓ Generate visualizations

[Register as Researcher](#)

Already have an account? [Sign in](#)

Condensed FAQ



The screenshot shows the PrivaGene FAQ page. At the top right is a "Login" button. Below it is a section titled "Learn More About PrivaGene" with three buttons: "FAQ" (highlighted in purple), "Terms of Service", and "Privacy Policy". Three rounded rectangular boxes contain questions and answers:

- What is PSI Technology?**

Private Set Intersection allows secure risk computation without exposing your genetic data.

[Learn more →](#)
- How secure is my data?**

AES-256 encryption and PSI technology ensure your genetic information remains completely private.

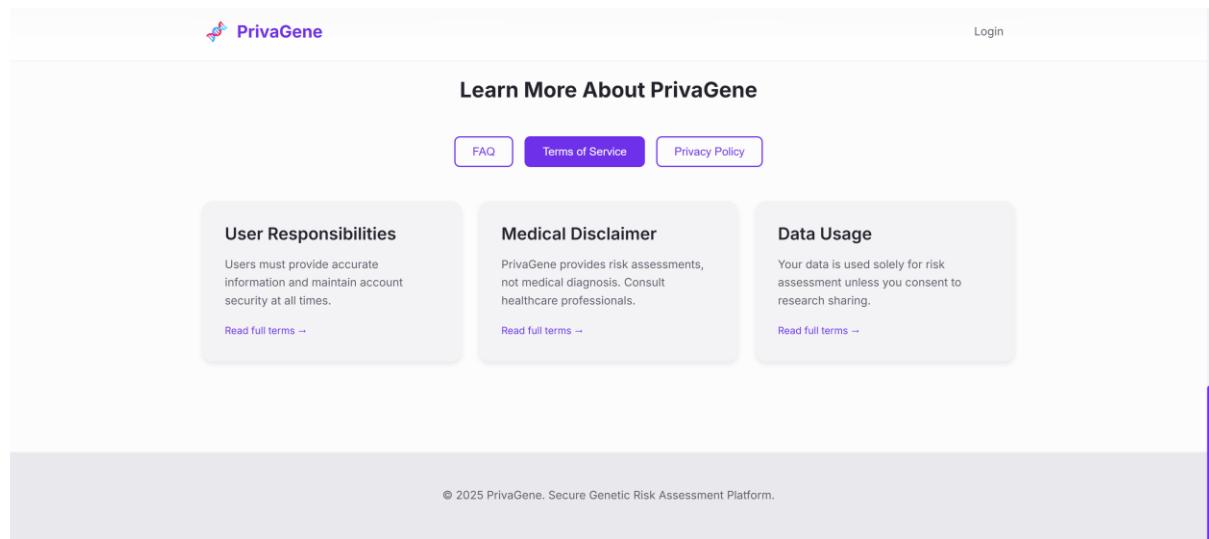
[Learn more →](#)
- Can I book appointments?**

Yes, schedule consultations with certified genetic counselors directly through the platform.

[Learn more →](#)

At the bottom center is a copyright notice: "© 2025 PrivaGene. Secure Genetic Risk Assessment Platform."

Condensed TOS



The screenshot shows the PrivaGene Terms of Service page. At the top right is a "Login" button. Below it is a section titled "Learn More About PrivaGene" with three buttons: "FAQ", "Terms of Service" (highlighted in purple), and "Privacy Policy". Three rounded rectangular boxes contain sections:

- User Responsibilities**

Users must provide accurate information and maintain account security at all times.

[Read full terms →](#)
- Medical Disclaimer**

PrivaGene provides risk assessments, not medical diagnosis. Consult healthcare professionals.

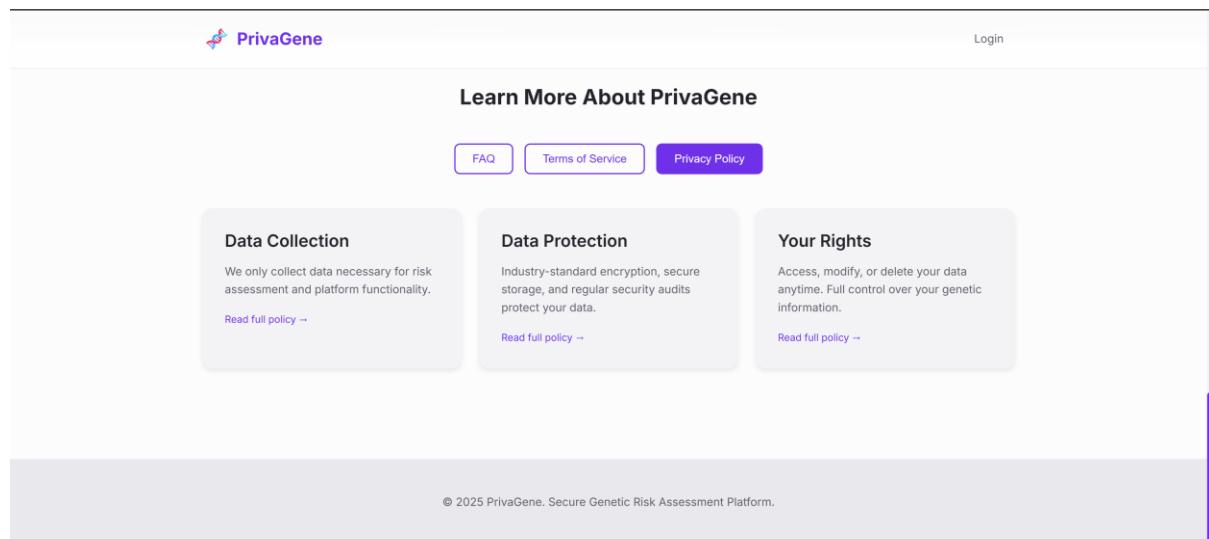
[Read full terms →](#)
- Data Usage**

Your data is used solely for risk assessment unless you consent to research sharing.

[Read full terms →](#)

At the bottom center is a copyright notice: "© 2025 PrivaGene. Secure Genetic Risk Assessment Platform."

Condensed Privacy Policy



The screenshot shows the PrivaGene Privacy Policy page. At the top right is a "Login" button. Below it is a section titled "Learn More About PrivaGene" with three buttons: "FAQ", "Terms of Service", and "Privacy Policy" (highlighted in purple). Three rounded rectangular boxes contain sections:

- Data Collection**

We only collect data necessary for risk assessment and platform functionality.

[Read full policy →](#)
- Data Protection**

Industry-standard encryption, secure storage, and regular security audits protect your data.

[Read full policy →](#)
- Your Rights**

Access, modify, or delete your data anytime. Full control over your genetic information.

[Read full policy →](#)

At the bottom center is a copyright notice: "© 2025 PrivaGene. Secure Genetic Risk Assessment Platform."

Expanded FAQ

The screenshot shows the PrivaGene FAQ page with a header featuring the PrivaGene logo and a login link. The main title is "Frequently Asked Questions" with a subtitle "Find answers to common questions about PrivaGene". A search bar is present. The content is organized into several sections:

- Privacy & Security**
 - How is my genetic data protected?**

Your genetic data is encrypted using AES-256 encryption before upload. We use Private Set Intersection (PSI) to compute risk assessments without exposing your raw genetic information. Your data is never stored in plaintext.
 - Who can access my data?**

Only you have access to your full genetic data and results. Hospitals and specialists can only see information you explicitly share with them during consultations. Researchers only access anonymized, aggregated data with your consent.
 - Can I delete my data?**

Yes, you can delete your account and all associated data at any time from your profile settings. Deletion is permanent and cannot be undone.
- How PSI Works**
 - What is Private Set Intersection (PSI)?**

PSI is a cryptographic technique that allows two parties to find common elements in their datasets without revealing any other information. In PrivaGene, we use PSI to match your genetic markers against disease-associated genes in our database without exposing your raw genetic data.
 - How accurate are the risk assessments?**

Our risk assessments are based on peer-reviewed genetic research and continuously updated gene databases. However, genetic risk is just one factor in disease development. Environmental factors, lifestyle, and family history also play important roles.
 - How long does risk assessment take?**

PSI computation typically takes 2-5 minutes depending on the number of disease categories selected and the size of your genetic data file.
- Uploading Data**
 - What file formats are supported?**

We accept genetic data in common formats: VCF, 23andMe, AncestryDNA, and standard CSV files with genetic markers. Maximum file size is 50MB.
 - Can I upload multiple files?**

Yes, you can upload multiple genetic data files. Each upload is processed separately and tracked in your upload history.
- Support & Consultations**
 - How do I book a consultation?**

From your dashboard, navigate to the Appointments section. You can view available specialists, select a time slot, and book a consultation directly through the platform.
 - Can't find your answer?**

Contact our support team and we'll get back to you within 24 hours.

At the bottom, a footer notes: © 2025 PrivaGene. Secure Genetic Risk Assessment Platform.

Expanded TOS

 PrivaGene [Login](#)

Terms of Service

Last updated: November 2025

Acceptance of Terms

By accessing and using PrivaGene, you accept and agree to be bound by these Terms of Service. If you do not agree to these terms, please do not use our platform.

Service Description

PrivaGene provides genetic disease risk assessment services using Private Set Intersection (PSI) technology. Our services include:

- Secure genetic data upload and storage
- Privacy-preserving risk assessment computation
- Consultation booking with genetic specialists
- Access to anonymized research data (with consent)

User Responsibilities

As a user, you agree to:

- Provide accurate and truthful information
- Maintain the confidentiality of your account credentials
- Not upload data belonging to others without proper authorization
- Use the platform only for lawful purposes
- Not attempt to breach security or access unauthorized data

Medical Disclaimer

IMPORTANT:
PrivaGene provides genetic risk assessments for informational purposes only. Our results are NOT a substitute for professional medical advice, diagnosis, or treatment. Always consult with qualified healthcare providers regarding your health and genetic risks.

Data Ownership

You retain full ownership of your genetic data. PrivaGene acts as a secure custodian of your data. You may download or delete your data at any time. Upon account deletion, all your data will be permanently removed from our systems within 30 days.

Limitation of Liability

PrivaGene and its affiliates shall not be liable for:

- Medical decisions made based on risk assessment results
- Accuracy of third-party genetic data uploaded to the platform
- Service interruptions or technical issues beyond our control
- Indirect, incidental, or consequential damages

Account Termination

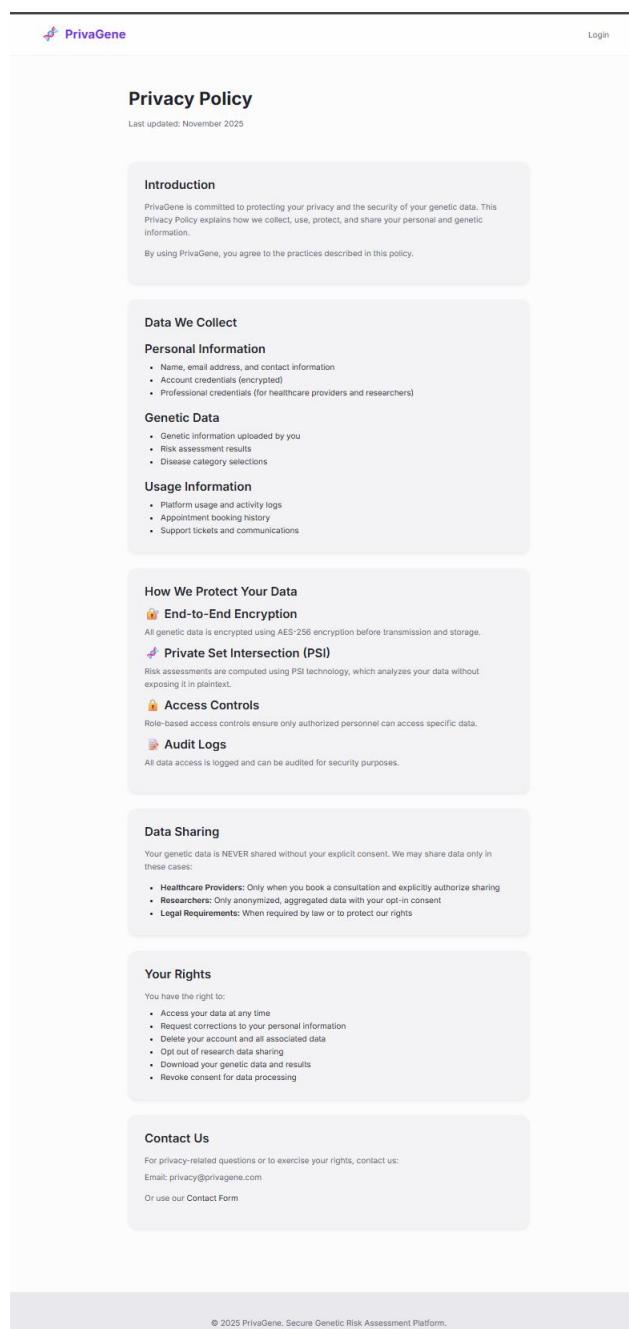
We reserve the right to suspend or terminate accounts that violate these terms, engage in fraudulent activity, or misuse the platform. You may terminate your account at any time from your profile settings.

Changes to Terms

We may update these Terms of Service from time to time. We will notify users of significant changes via email and platform notifications. Continued use of the platform after changes constitutes acceptance of the new terms.

© 2025 PrivaGene. Secure Genetic Risk Assessment Platform.

Expanded privacy policy



The screenshot shows the PrivaGene Privacy Policy page. At the top, there's a header with the PrivaGene logo and a 'Login' link. Below the header, the title 'Privacy Policy' is displayed, followed by a note that it was last updated in November 2025. The page is organized into several sections:

- Introduction**: A general overview of the policy's purpose and how it protects user privacy.
- Data We Collect**:
 - Personal Information**: Includes name, email address, contact information, account credentials (encrypted), and professional credentials (for healthcare providers and researchers).
 - Genetic Data**: Includes genetic information uploaded by the user, risk assessment results, and disease category selections.
 - Usage Information**: Includes platform usage and activity logs, appointment booking history, support tickets, and communications.
- How We Protect Your Data**:
 - End-to-End Encryption**: All genetic data is encrypted using AES-256 encryption before transmission and storage.
 - Private Set Intersection (PSI)**: Risk assessments are computed using PSI technology, which analyzes your data without exposing it in plaintext.
 - Access Controls**: Role-based access controls ensure only authorized personnel can access specific data.
 - Audit Logs**: All data access is logged and can be audited for security purposes.
- Data Sharing**: Your genetic data is NEVER shared without your explicit consent. It may be shared under certain circumstances:
 - Healthcare Providers**: Only when you book a consultation and explicitly authorize sharing.
 - Researchers**: Only anonymized, aggregated data with your opt-in consent.
 - Legal Requirements**: When required by law or to protect our rights.
- Your Rights**: You have the right to:
 - Request access at any time
 - Request corrections to your personal information
 - Delete your account and all associated data
 - Opt out of research data sharing
 - Download your genetic data and results
 - Revoke consent for data processing
- Contact Us**: For privacy-related questions or to exercise your rights, contact us:
 - Email: privacy@privagene.com
 - Or use our [Contact Form](#)

At the bottom of the page, there's a footer note: "© 2025 PrivaGene. Secure Genetic Risk Assessment Platform."

Register as patient

[← Choose Different Role](#)



Patient Registration

Create your account to start your genetic health journey

First Name *

Last Name *

Email Address *

Date of Birth * dd/mm/yyyy

Phone Number +65 9223 4567

Optional, for appointment reminders

Password * At least 8 characters

Confirm Password *

I agree to the [Terms of Service](#) and [Privacy Policy](#)

I consent to share anonymized data for research purposes

Create Account

Already have an account? [Sign in](#)

Register as hospital specialist

[← Choose Different Role](#)



Hospital Specialist Registration

Join our network of genetic counseling professionals

First Name *

Last Name *

Professional Email *

Specialty *

License Number *

Hospital/Organization

Password *

Password must contain:
✓ At least 8 characters
✓ One uppercase letter
✓ One number

Confirm Password *

I agree to the [Terms of Service](#) and [Privacy Policy](#)

Create Account

Already have an account? [Sign in](#)

Register as hospital admin

[← Choose Different Role](#)



Hospital Admin Registration

Manage your organization's genetic database

First Name *

Last Name *

Email Address *

Organization *

Hospital/Research Institute Name

Password *

Password must contain:

- ✓ At least 8 characters
- ✓ One uppercase letter
- ✓ One number

Confirm Password *

I agree to the [Terms of Service](#) and [Privacy Policy](#)

Create Account

Already have an account? [Sign in](#)

Register as researcher

[← Choose Different Role](#)



Researcher Registration

Access anonymized genetic data for your research

First Name *

Last Name *

Academic Email *

Institution *

Research Field *

ORCID iD
Optional researcher identifier

Password *

Password must contain:
 At least 8 characters
 One uppercase letter
 One number

Confirm Password *

I agree to the [Terms of Service](#) and [Privacy Policy](#)

Create Account

Already have an account? [Sign in](#)

patient dashboard

Welcome Back, John Doe!

Manage your genetic health data and assessments.

John Doe
JohnD@gmail.com

Upload Gene Data
Upload your genetic data securely

New Assessment
Start a risk assessment

Book Appointment
Meet with a specialist

Gene Files Uploaded: 1

Assessments Done: 1

Upcoming Appointments: 1

Overall Risk: 30% Medium

Recent Risk Assessments: 1 Disease Categories (December 2, 2025) - 30% Risk

Upcoming Appointments: gut issues (December 11, 2025 at 13:00) - CONFIRMED

patient upload gene data

Upload Genetic Data

Upload your genetic data file for secure analysis

Supported File Formats: VCF, FASTA, TXT, or CSV files containing your genetic data. Your file will be encrypted for secure storage.

Drop your file here or click to browse
Maximum file size: 100MB

Upload & Encrypt

Your Uploaded Files

No files uploaded yet

Patient uploading gene data

[← Back to Dashboard](#)

Upload Genetic Data

Upload your genetic data file for secure analysis

Supported File Formats

VCF, FASTA, TXT, or CSV files containing your genetic data. Your file will be encrypted for secure storage.



Drop your file here or click to browse

Maximum file size: 100MB

mygenetest.txt

4 Bytes

Remove

Upload & Encrypt

Your Uploaded Files



No files uploaded yet

Patient gene data uploaded

[← Back to Dashboard](#)

Upload Genetic Data

Upload your genetic data file for secure analysis

Supported File Formats

VCF, FASTA, TXT, or CSV files containing your genetic data. Your file will be encrypted for secure storage.



Drop your file here or click to browse

Maximum file size: 100MB

[Upload & Encrypt](#)

Your Uploaded Files

 mygenetest.txt

4 Bytes • Uploaded December 2, 2025

 Encrypted (encrypted_id_1764687108406_mk2basigt)

PROCESSED

patient risk assessment



John Doe
JohnD@gmail.com

-  Dashboard
-  Upload Gene Data
-  Risk Assessment
-  My Results
-  Appointments
-  Profile
-  Logout

Select Disease Categories

Choose which disease categories you want to assess your risk for

Available Disease Categories

Select one or more categories to compute your risk

Breast Cancer
Hereditary breast cancer risk

Ovarian Cancer
Hereditary ovarian cancer risk

Alzheimer's Disease
Late-onset Alzheimer's disease risk

Hemochromatosis
Iron overload disorder

Li-Fraumeni Syndrome
Multiple cancer risk syndrome

1 categories selected

[Compute Risk Assessment](#)

patient my results

The screenshot shows the PrivaGene mobile application interface. On the left is a vertical navigation bar with icons for Dashboard, Upload Gene Data, Risk Assessment, My Results (selected), Appointments, Profile, and Logout. The main content area has a header "Your Risk Assessment Results" with a "Back to Dashboard" link. Below it is a large circular "Overall Risk Score" graphic with "30%" in the center, labeled "Risk Level". A message states "Your overall genetic disease risk is medium." To the right is a "Disease-Specific Risk" section for "Li Fraumeni syndrome" (Affected genes: BRCA1, BRCA2) with a green progress bar at 30% and the label "LOW". At the bottom are three buttons: "Download Report", "View Detailed Explanation", and "Book Consultation".

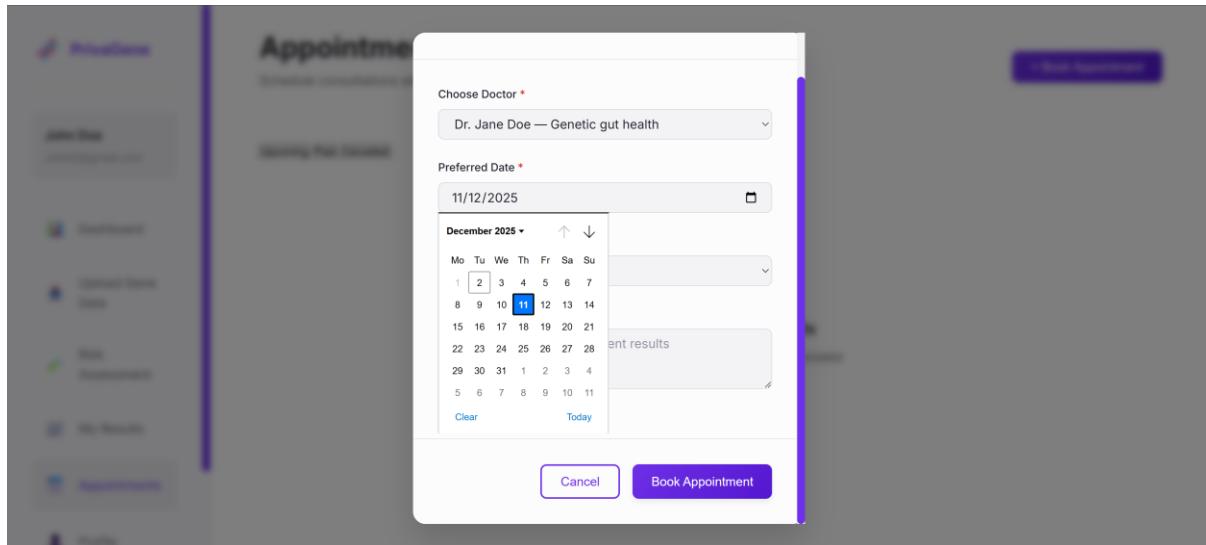
patient appointments

The screenshot shows the PrivaGene mobile application interface. The left navigation bar is identical to the previous screenshot. The main content area has a header "Appointments" with a sub-header "Schedule consultations with genetic counselors". It includes tabs for "Upcoming", "Past", and "Cancelled". A "Book Appointment" button is located in the top right. In the center, there is a placeholder icon and text "No upcoming appointments" with a sub-instruction "Book a consultation with a genetic counselor".

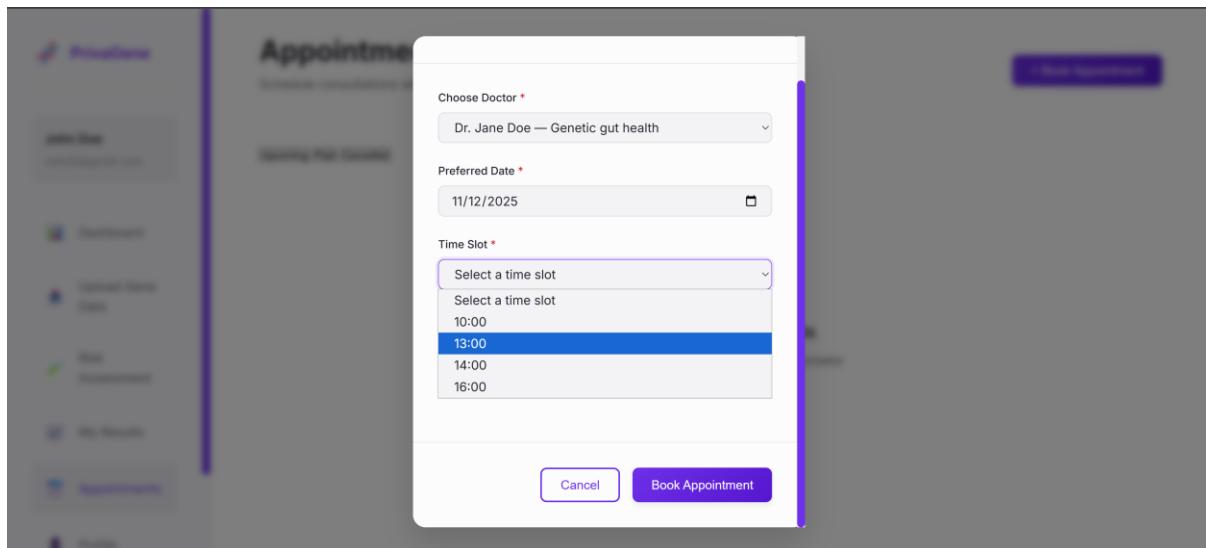
Patient book appointment – choose doctor

The screenshot shows a modal dialog box titled "Book Appointment" overlaid on the previous "Appointments" screen. The dialog contains fields for "Choose Doctor" (a dropdown menu with "Select a doctor"), "Preferred Date" (a date input field with placeholder "dd/mm/yyyy"), "Time Slot" (a dropdown menu with placeholder "Select date and doctor first"), and "Reason for Visit" (a text input field with placeholder "e.g., Discuss risk assessment results"). At the bottom are "Cancel" and "Book Appointment" buttons.

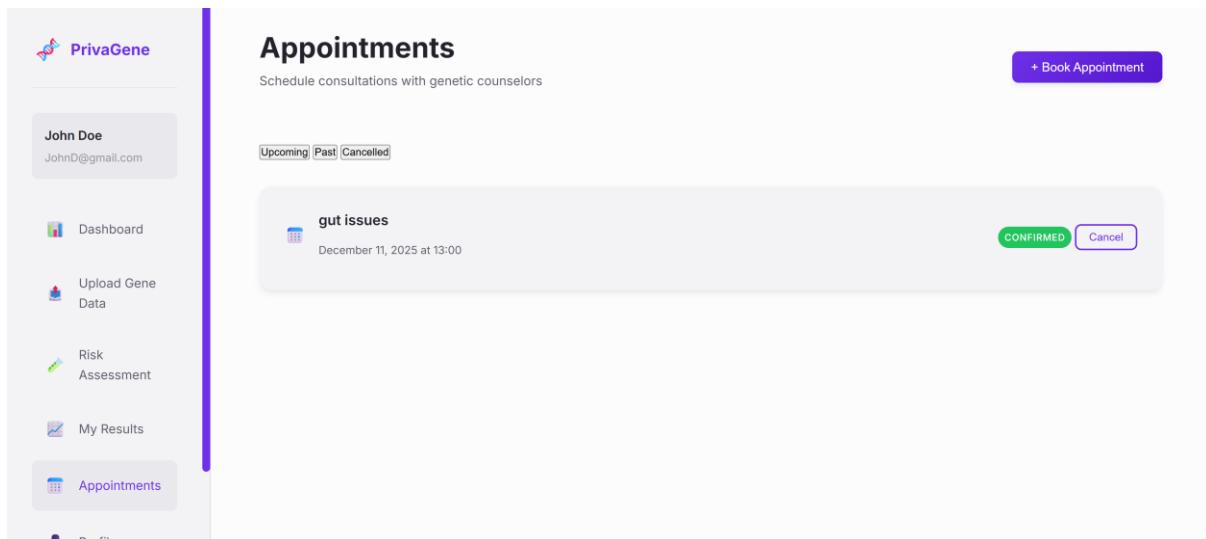
Patient book appointment – choose date



Patient book appointment – choose time slot



Patient appointment shown



patient profile

The screenshot shows the 'Profile Settings' section of the PrivaGene application. At the top, it says 'Manage your account information and preferences'. Below this, there are four main sections: 'Personal Information', 'Privacy & Data Sharing', 'Security', and 'Delete Account'.

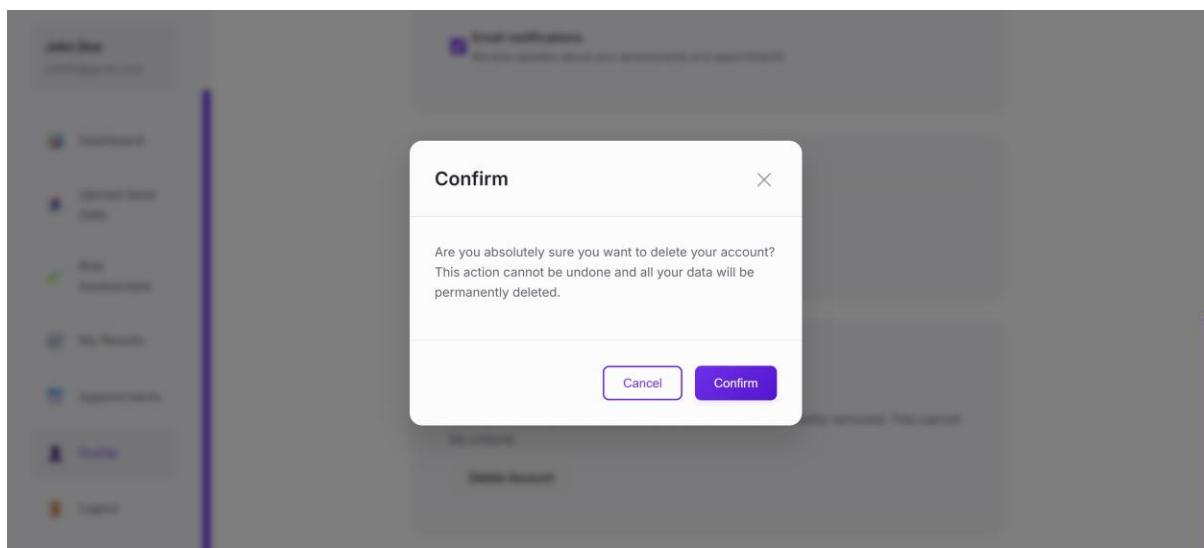
- Personal Information:** Fields for First Name (John), Last Name (Doe), Email Address (John@gmail.com), Date of Birth (19/06/1998), and Phone Number (empty). A 'Save Changes' button is at the bottom.
- Privacy & Data Sharing:** Options to share anonymized data for research (unchecked) and receive email notifications (checked).
- Security:** A 'Change Password' button.
- Delete Account:** A red link that says 'Once you delete your account, all your data will be permanently removed. This cannot be undone.' Below it is a 'Delete Account' button.

On the left side of the main content area, there is a sidebar with a user profile picture for 'John Doe' (john@gmail.com) and a navigation menu with links: Dashboard, Upload Gene Data, Risk Assessment, My Results, Appointments, Profile (which is selected and highlighted in purple), and Logout.

Patient forgot password

A modal dialog titled 'Change Password' is displayed over the main application interface. It contains three input fields: 'Current Password *', 'New Password *', and 'Confirm New Password *'. Each field has a placeholder text and a red asterisk indicating it is required. At the bottom of the dialog are two buttons: 'Cancel' (gray) and 'Change Password' (purple).

Patient delete account



Hospital specialist Dashboard

Hospital specialist Patients

Hospital specialist Appointments

The screenshot shows the PrivaGene mobile application interface. On the left is a vertical navigation sidebar with the following items:

- PrivaGene logo
- User info: Jane Doe, JaneD@CGH.com
- Dashboard
- Patients
- Appointments** (highlighted in blue)
- Profile
- Logout

The main content area is titled "Appointments" and has a subtitle "Manage your consultation schedule". It includes a navigation bar with tabs: Upcoming (selected), Past, and Cancelled. Below is a table with the following data:

DATE	TIME	PATIENT	REASON	STATUS	ACTIONS
December 11, 2025	13:00	Patient id_1764683868475_yrqtseuj1	gut issues	CONFIRMED	<button>Complete</button>

Hospital specialist Profile

The screenshot shows the "Profile Settings" section of the PrivaGene app. The left sidebar shows the following items:

- Profile Settings (selected)
- Dashboard
- Patients
- Appointments
- Profile
- Logout

The main content area is titled "Profile Settings" and contains three sections:

- Professional Information:** Fields for First Name, Surname, Email (JaneD@CGH.com), and Phone Number.
- Change Password:** Fields for Current Password, New Password, and Confirm New Password, followed by a "Update Profile" button.
- Delete Account:** A warning message: "Once you delete your account, all your data will be permanently removed. This cannot be undone." with a "Delete Account" button.

Hospital specialist Delete Account

The screenshot shows a confirmation dialog box in the foreground, overlaid on the PrivaGene app interface. The dialog title is "Confirm" and the message reads: "Are you absolutely sure you want to delete your account? This action cannot be undone and all your data will be permanently deleted." At the bottom are two buttons: "Cancel" (gray) and "Confirm" (purple).

Hospital admin Dashboard

The Admin Dashboard interface for PrivaGene. On the left, a sidebar shows the user's name (Jannet Doe) and email (JannetD@CGH.com), along with links for Dashboard, Gene Database, Profile, and Logout. The main area is titled "Admin Dashboard" with the subtitle "Manage your organization's genetic database". It features four summary cards: Total Genes (5), Disease Categories (5), Active Users (5), and Total Assessments (0). Below these are three buttons: "Manage Genes" (Add or update gene database), "Profile Settings" (Update your information), and "View Analytics" (Platform insights).

Hospital admin Gene Database

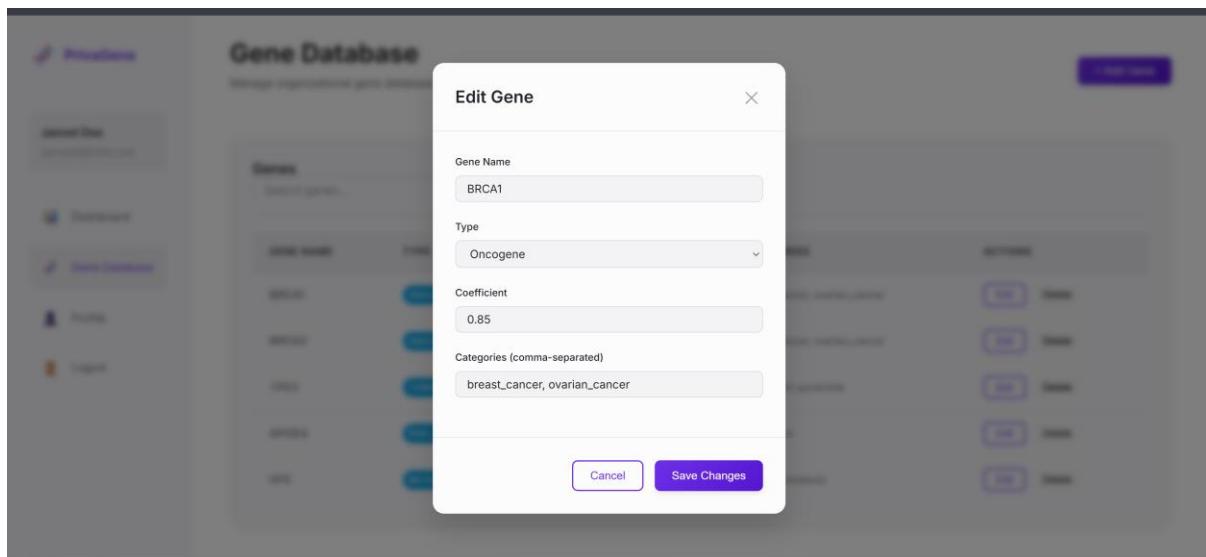
The Gene Database page for PrivaGene. The sidebar includes the user's profile information and links for Dashboard, Gene Database, Profile, and Logout. The main title is "Gene Database" with the subtitle "Manage organizational gene database and disease categorization". A "Search genes..." input field is at the top right, and a "+ Add Gene" button is located on the far right. The central part of the page displays a table of genes:

GENE NAME	TYPE	COEFFICIENT	CATEGORIES	ACTIONS
BRCA1	ONCOGENE	0.85	breast_cancer, ovarian_cancer	Edit Delete
BRCA2	ONCOGENE	0.8	breast_cancer, ovarian_cancer	Edit Delete
TP53	TUMOR_SUPPRESSOR	0.9	li_fraumeni_syndrome	Edit Delete
APOE4	RISK_FACTOR	0.65	alzheimers	Edit Delete
HFE	MUTATION	0.7	hemochromatosis	Edit Delete

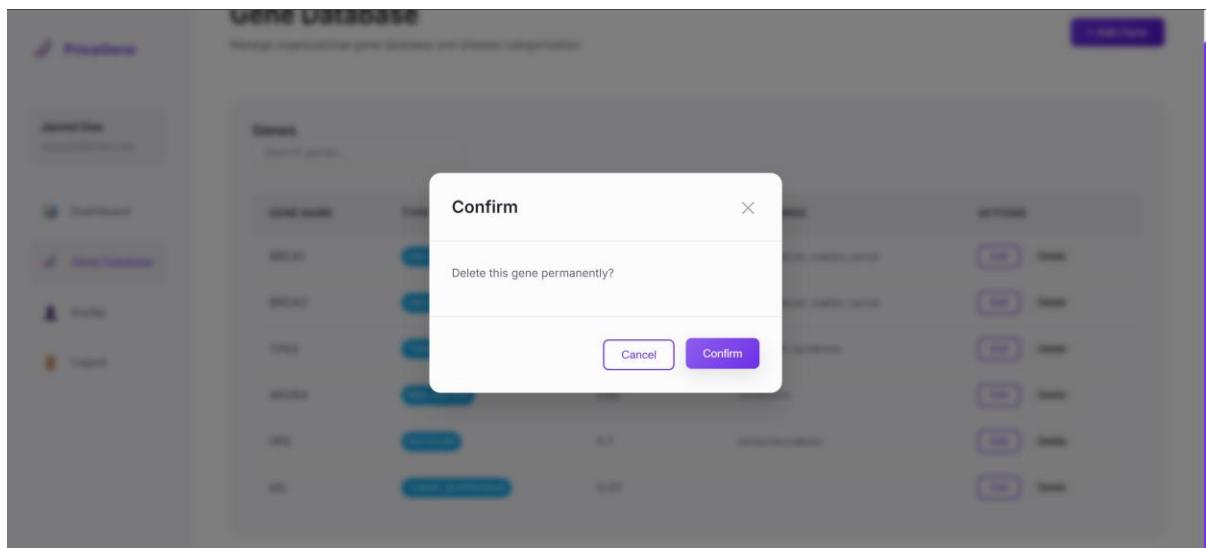
Hospital admin add new gene

A modal dialog titled "Add New Gene" is displayed over the Gene Database list. It contains fields for "Gene Name" (Newgene1), "Type" (Oncogene selected from a dropdown), and "Coefficient" (0.62). At the bottom are "Cancel" and "Add Gene" buttons.

Hospital admin edit gene



Hospital admin delete gene



Hospital admin Profile

The screenshot shows the 'Profile Settings' section of the PrivaGene Admin Dashboard. It includes fields for 'Admin Information' (First Name: Janett, Last Name: Doe), 'Change Password' (Current Password, New Password, Confirm New Password), and a 'Delete Account' section with a warning message and a 'Delete Account' button.

Hospital admin view analytics

The screenshot displays the 'Platform Analytics' modal window. It shows summary statistics: Total Genes (5), Disease Categories (5), Total Users (5), and Risk Assessments (0). Below this, the 'User Distribution' section provides details: Patients (1), Hospital Specialists (1), Researchers (1), and Average Risk (0%). A 'Close' button is at the bottom right.

Hospital admin delete profile

The screenshot shows a 'Confirm' dialog box asking if the user is absolutely sure they want to delete their account. It states that the action cannot be undone and all data will be permanently deleted. Two buttons, 'Cancel' and 'Confirm', are at the bottom.

Research Dashboard

The dashboard features a sidebar with user info (Johnny Doe, johnnyD@NUS.com) and links (Dashboard, Datasets, Analytics, Profile, Logout). It includes four main cards: Available Datasets (3), Anonymized Records (0), Disease Categories (5), and Active Queries (0). Below these is a 'Browse Datasets' section with a 'Privacy Protected Data' notice. A 'Recent Queries' section shows no queries yet.

Research Datasets

The page has a sidebar with user info (Johnny Doe, johnnyD@NUS.com) and links (Dashboard, Datasets, Analytics, Profile, Logout). It displays four datasets: 'Genetic Risk Assessment Data' (0 records, 5 categories), 'Disease Category Distribution' (5 categories), 'Temporal Trends' (Time Range: Last 12 months), and 'Aggregated Statistics' (15+ metrics). Each dataset card includes 'Export CSV' and 'View Sample' buttons.

Researcher Query Builder

The screenshot shows the PrivaGene platform's Query Builder section. On the left, a sidebar for 'Johnny Doe' (johnnyD@NUS.com) includes links for Dashboard, Datasets, Query Builder (highlighted in purple), Analytics, Profile, and Logout. The main area is titled 'Query Builder' with the subtitle 'Build custom queries to analyze anonymized genetic data'. It features 'Query Parameters' with fields for Age Range (17-66), Risk Level (Medium (30-70%)), Disease Categories (Breast Cancer, Ovarian Cancer, Alzheimer's checked, Hemochromatosis), and buttons for 'Run Query' and 'Reset'.

Researcher query results

The screenshot shows the 'Query Results' section for 'Johnny Doe'. The sidebar is identical to the previous screen. The main area displays a summary table with 6 total records, an average risk of 53%, and 0 high-risk cases. Below is a detailed table of individual results:

ID	AGE	RISK LEVEL	CATEGORIES	ASSESSMENT DATE
RES-1010	40	54%	Breast Cancer	September 23, 2024
RES-1011	37	56%	Ovarian Cancer	March 11, 2024
RES-1013	65	56%	Ovarian Cancer	March 4, 2024
RES-1016	22	54%	Ovarian Cancer	February 11, 2024
RES-1021	23	63%	Breast Cancer	September 5, 2024
RES-1023	64	35%	Ovarian Cancer	May 27, 2024

Research Analytics

The screenshot shows the 'Statistical Analytics' section. The sidebar is identical to the previous screens. The main area contains four placeholder cards: 'Risk Distribution' (placeholder text: 'Risk distribution chart would appear here (Visualization placeholder)'), 'Disease Category Breakdown' (placeholder text: 'Category distribution chart would appear here (Visualization placeholder)'), 'Temporal Trends' (placeholder text: 'Trend line chart would appear here (Visualization placeholder)'), and 'Correlation Matrix' (placeholder text: 'Heatmap would appear here (Visualization placeholder)').

Research Profile

The screenshot shows the 'Profile Settings' section of the PrivaGene platform. On the left, a sidebar menu includes 'Dashboard', 'Datasets', 'Analytics', 'Profile' (which is selected and highlighted in purple), and 'Logout'. The main content area is titled 'Profile Settings: Manage your research account information' for 'Johnny Doe' (johnny@BNUS.com). It contains three sections: 'Researcher Information' (First Name: Johnny, Last Name: Doe, Institution: National University of Singapore, Research Focus: Etiology, Genetics, Cancer), 'Change Password' (Current Password, New Password, Confirm New Password, Update Password), and 'Delete Account' (warning message: 'Once you delete your account, all your data will be permanently removed. This cannot be undone.', Delete Account button). A 'Save Changes' button is located at the bottom of the 'Researcher Information' section.

Researcher delete account

A modal dialog box titled 'Confirm' is displayed over a blurred background. The background shows the 'Delete Account' section of the profile settings page. The dialog contains the text: 'Are you absolutely sure you want to delete your account? This action cannot be undone and all your data will be permanently deleted.' At the bottom are two buttons: 'Cancel' (white outline) and 'Confirm' (purple).

System admin dashboard

The screenshot shows the 'System Dashboard' page for a system administrator (sysadmin@privagene.com). The sidebar on the left lists 'System Administrator' (selected), 'Dashboard', 'Audit Logs', 'User Management', 'Organizations', 'Platform Analytics', 'System Settings', and 'Logout'. The main content area has a title 'System Dashboard: Platform-wide management and oversight'. It features four summary cards: 'Total Organizations: 0', 'Platform Users: 0', 'Total Genes: 0', and 'Assessments Run: 0'. Below these are three larger cards: 'Manage Organizations' (Register and oversee hospitals), 'Platform Analytics' (View comprehensive insights), and 'System Settings' (Configure platform parameters). At the bottom is a 'System Health' section with status indicators for 'Database Status', 'PSI Computation Engine', and 'Encryption Service', all showing 'ONLINE', 'RUNNING', and 'ACTIVE' respectively.

System admin Audit logs

The screenshot shows the PrivaGene Audit Logs interface. On the left sidebar, there are links for Dashboard, Audit Logs (selected), User Management, Security, and Logout. The main area has a title 'Audit Logs' with a subtitle 'Monitor all system activity and user actions'. It includes a 'Filters' section with fields for User Email (user@example.com), Action (All Actions), Start Date (dd/mm/yyyy), and End Date (dd/mm/yyyy). Below this is a table titled 'Activity Logs (50)' with columns: TIMESTAMP, USER, ACTION, IP ADDRESS, and DETAILS. The table lists four log entries from December 2, 2025.

TIMESTAMP	USER	ACTION	IP ADDRESS	DETAILS
Dec 2, 2025, 02:00 PM	JohnD@gmail.com	UPDATE_PROFILE	192.168.208.12	Action performed successfully
Dec 2, 2025, 01:02 PM	JohnD@gmail.com	LOGOUT	192.168.248.22	Action performed successfully
Dec 2, 2025, 10:28 AM	sysadmin@privagene.com	UPLOAD_GENE	192.168.44.79	Action performed successfully
Dec 2, 2025, 08:43 AM	JaneD@CGH.com	UPLOAD_GENE	192.168.213.21	Action performed successfully

System admin User management

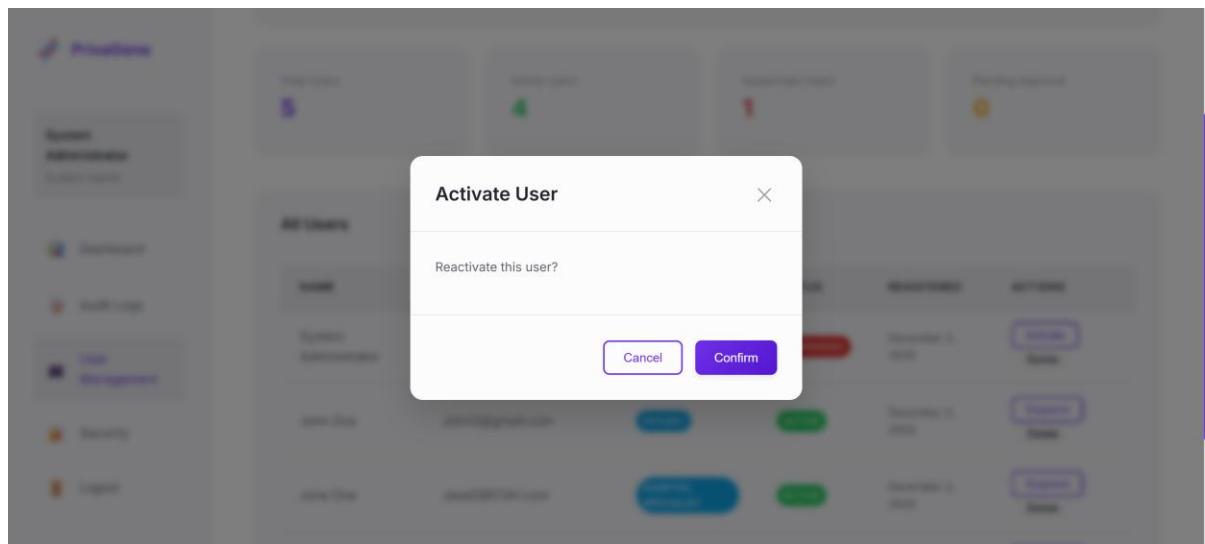
The screenshot shows the PrivaGene User Management interface. The left sidebar includes links for Dashboard, Audit Logs, User Management (selected), Security, and Logout. The main area features a title 'User Management' with a subtitle 'Manage user accounts and permissions'. It displays statistics: Total Users (5), Active Users (3), Suspended Users (0), and Pending Approval (2). Below this is a table titled 'All Users' with columns: NAME, EMAIL, ROLE, STATUS, REGISTERED, and ACTIONS. The table lists five users with their respective details and action buttons.

NAME	EMAIL	ROLE	STATUS	REGISTERED	ACTIONS
System Administrator	sysadmin@privagene.com	SYSTEM ADMIN	ACTIVE	December 2, 2025	Suspend Delete
John Doe	JohnD@gmail.com	PATIENT	ACTIVE	December 2, 2025	Suspend Delete
Jane Doe	JaneD@CGH.com	HOSPITAL SPECIALIST	ACTIVE	December 2, 2025	Approve Reject Delete
Jannet Doe	JannetD@CGH.com	HOSPITAL Admin	ACTIVE	December 2, 2025	Approve Reject Delete
Johnny Doe	JohnnyD@NUS.com	RESEARCHER	ACTIVE	December 2, 2025	Suspend Delete

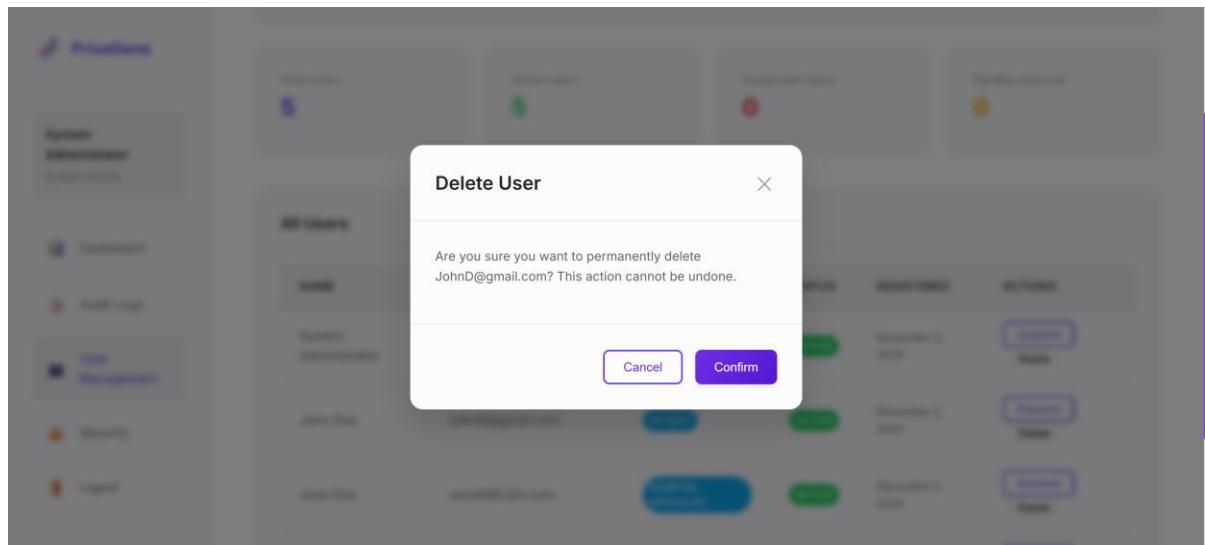
System admin user suspend user

The screenshot shows a 'Suspend User' modal window overlaid on the User Management page. The modal contains a confirmation message: 'Are you sure you want to suspend sysadmin@privagene.com? They will not be able to access the platform.' It has 'Cancel' and 'Confirm' buttons. In the background, the user list table is visible with several users listed and their status as 'ACTIVE'.

System admin user unsuspend user



System admin user delete user



System admin Organisations

A screenshot of the "Manage Organizations" page. At the top, there is a header with the PrivaGene logo and the text "Manage Organizations" and "Approve and manage hospital and research organization registrations". Below the header, there are two main sections: "Pending Organization Registrations" and "Active Organizations". The "Pending Organization Registrations" section has a message "No pending registrations". The "Active Organizations" section displays a table with the following data:

ORGANIZATION	TYPE	ADMIN	USERS	JOINED	STATUS
Unknown	Medical	JaneD@CGH.com	1	December 2, 2025	ACTIVE
Changi General Hospital	Hospital	JannetD@CGH.com	1	December 2, 2025	ACTIVE

On the left side of the page, there is a vertical sidebar with the following navigation items: "System Administrator", "Dashboard", "Audit Logs", "User Management", "Organizations" (selected), "Platform Analytics", "System Settings", and "Security".

System admin Platform analytics

 PrivaGene

System Administrator
sysadmin@privagene.com

 Dashboard

 Audit Logs

 User Management

 Organizations

 Platform Analytics

 System Settings

 Security



Chart visualization placeholder
(Integrate charting library)

Platform Analytics
System-wide metrics and performance insights

Total Users **5**
↑ 12% this month

Risk Assessments **0**
↑ 8% this month

Active Organizations **1**
5 pending approval

System Uptime **99.8%**
Last 30 days

User Growth

Assessment Activity

System admin System Setting

System Settings

Configure platform-wide settings and preferences

General Settings

Platform Name

PrivaGene

Support Email

support@privagene.com

Max File Upload Size (MB)

50

[Save Changes](#)

Security Policies

[Require email verification](#)

Users must verify email before accessing the platform

[Enable 2FA for all users](#)

Require two-factor authentication for enhanced security

[Auto-suspend inactive accounts](#)

Suspend accounts inactive for 90+ days

Data Retention

Audit Log Retention (days)

365

How long to keep audit logs before archival

Assessment Data Retention (days)

730

How long to keep risk assessment data

[Save Changes](#)

System Status

Database Status

HEALTHY

API Server

RUNNING

Storage Used

2.4 GB / 100 GB (2.4%)

Last Backup

2 hours ago

System admin Security

The screenshot shows the 'Security Settings' page under the 'System Administrator' section. On the left sidebar, there are links for Dashboard, Audit Logs, User Management, and Security. The main content area is titled 'Encryption Key Rotation'. It includes an 'About Key Rotation' section with a note about regular key rotation being essential for security, stating it re-encrypts data with new keys while maintaining compatibility. Below this, a green checkmark indicates 'All keys are up to date' with 'No recent rotation'. A purple 'Initiate Key Rotation' button is present. Further down is a 'Rotation History' table with two entries:

INITIATED AT	COMPLETED AT	STATUS	INITIATED BY
Nov 2, 2025, 10:38 PM	Nov 2, 2025, 10:39 PM	COMPLETED	System Admin
Oct 3, 2025, 10:38 PM	Oct 3, 2025, 10:39 PM	COMPLETED	System Admin

System admin initiate key rotation

A modal dialog box titled 'Initiate Key Rotation' is displayed. It contains a message asking if the user is sure they want to initiate key rotation, noting that the operation will run in the background for 5-10 minutes. At the bottom are 'Cancel' and 'Confirm' buttons.

ALL Successful operations come with generic message at top right

The screenshot shows the 'Welcome Back' login page. At the top right, a green success message box displays a checkmark and the text 'Login successful! Redirecting...'. The main form fields include 'Email Address *' with 'JohnD@gmail.com' entered, 'Password *' with masked input, and checkboxes for 'Remember me' and 'Forgot password?'. A large purple 'Sign In' button is at the bottom. Below the form, a link says 'Don't have an account? Sign up'.

ALL unsuccessful operations come with generic message at top right

The screenshot shows a sign-in form for 'PrivaGene'. At the top left is a 'Back to Home' link and a small DNA helix icon. The main heading is 'Welcome Back' with the sub-instruction 'Sign in to access your PrivaGene account'. Below this is a form field for 'Email Address *' containing 'JohnD@gmail.com'. The next field is 'Password *' with a red border around it, showing '*****'. A red error message 'Invalid credentials' is displayed below the password field. To the left of the password field is a 'Remember me' checkbox and to the right is a 'Forgot password?' link. A large purple 'Sign In' button is at the bottom. At the very bottom of the form area, there is a link 'Don't have an account? [Sign up](#)'. In the top right corner of the page, there is a red callout box with a white 'X' icon and the text 'Invalid password'.