DASHBAORD PRESENTATION

GenepoweRx™
Genetic Science powered by K&H

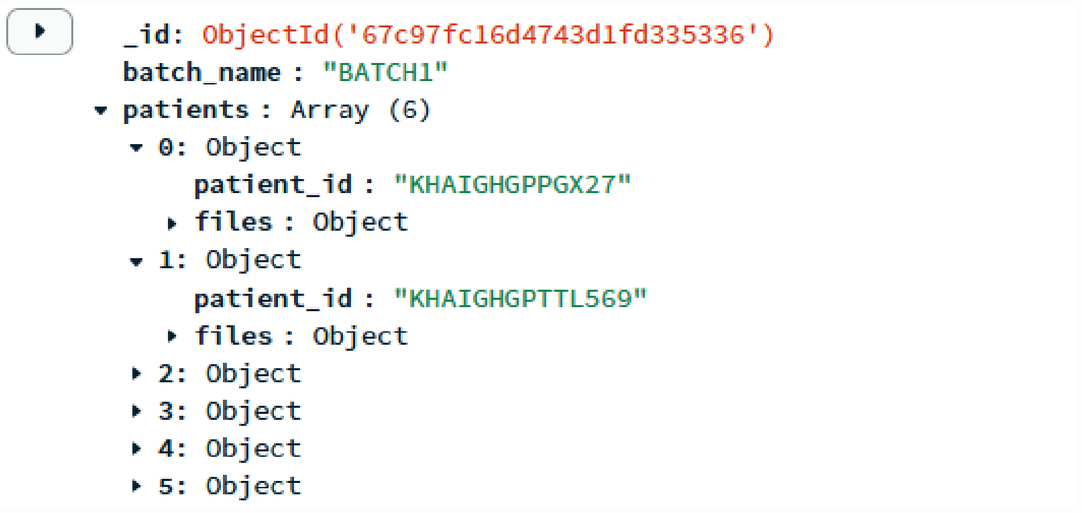
GeneConnectRx
AI enabled Drug Discovery Pipeline

Presented by: D. pavan, R.kavya

Key Functionalities

- Store JSON Data in MongoDB
- Upload the pdf files from the frontend
- Generate Excel Files
- Submit the reports
- Send Emails with Attachments

Flowchart



Pathogenic Variants

Pathogenic Variants

rsID	Gene Name	Gene Score	Lit	CH	POS	ref	alt	Zygosity	Consequence	Conseq score	clin sig	IMPACT
rs543016186	MTHFR	No	No	chr1	11795125	C	T	Heterozygous	missense variant	7/10	Pathogenic	MODERATE
rs201420507	DIO1	No	No	chr1	53906216	G	A	Heterozygous	missense variant	7/10	Pathogenic	MODERATE
rs1559416138	WNT10A	No	No	chr2	218892949	A	-	Heterozygous	frameshift variant	10/10	Pathogenic	HIGH
rs3974499	SLC9B1	No	No	chr4	102901326	AC	-	Heterozygous	frameshift variant	10/10	Pathogenic	HIGH
rs199422117	TBXAS1	No	No	chr7	140015731	G	A	Heterozygous	missense variant	7/10	Pathogenic	MODERATE
rs202003805	PRSS1	8	Yes	chr7	142750561	C	T	Heterozygous	missense variant	7/10	Pathogenic	MODERATE
rs786204713	ACADVL	7	No	chr17	7220783	AC	-	Heterozygous	frameshift variant	10/10	Pathogenic	HIGH
rs60726084	ATXN10	No	No	chr22	45795355	ATTCT	-	Heterozygous	intron variant	2/10	Pathogenic	MODIFIER

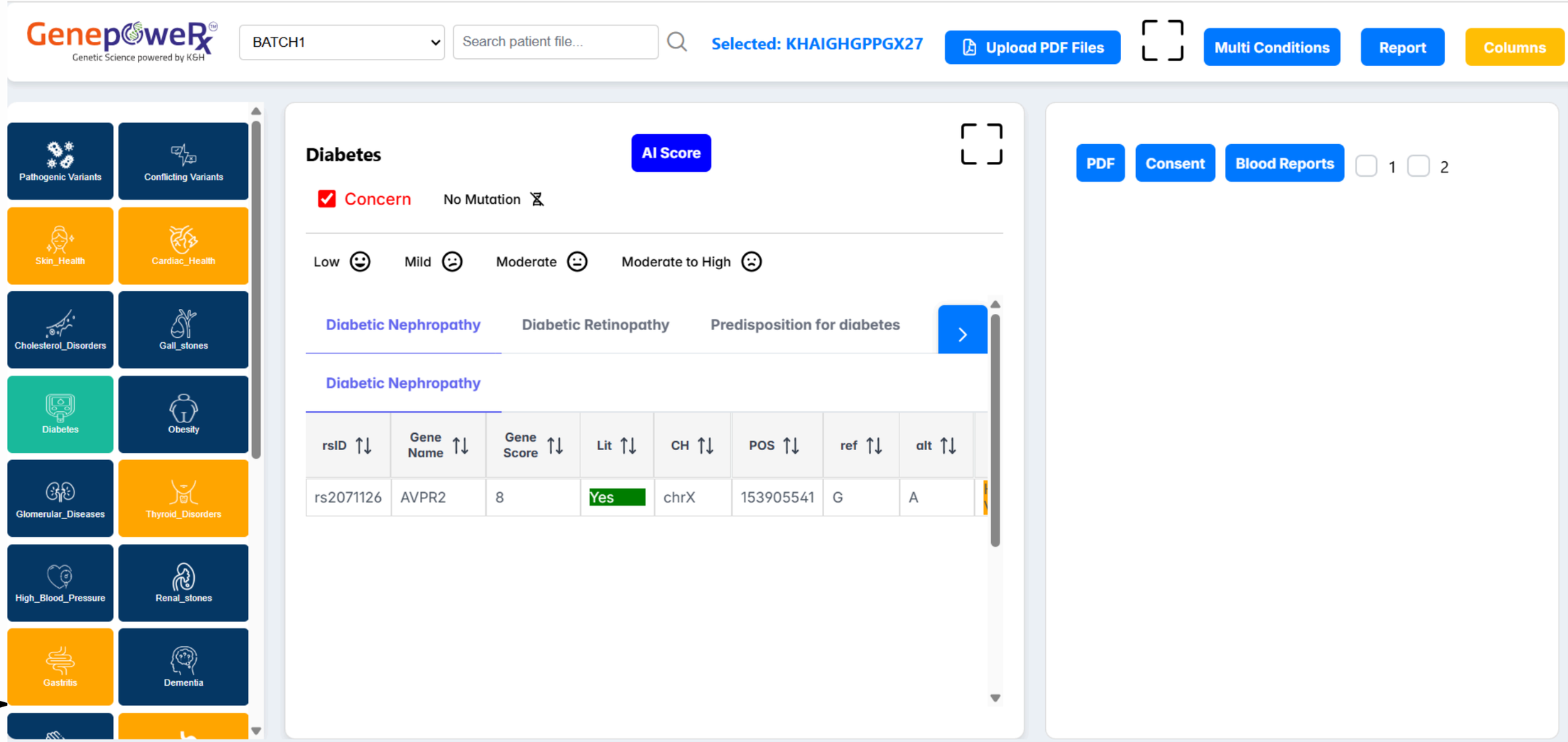
Dashboard Overview Content:

- **Purpose:** The dashboard provides a user-friendly interface to manage patient reports and their availability status.

- **Key Features:**

  - Submit patient reports
  - AI Score Display
  - Severity Selection
  - Full screen toggle mode
  - Update patient availability
  - View report submission and availability status
  - Upload the pdf files directly into the database from frontend

Dashboard


GenepoweRx
Genetic Science powered by K&H
BATCH1
Search patient file...
Selected: KHAIGHGPPGX27
Upload PDF Files
Multi Conditions
Report
Columns
Pathogenic Variants
Conflicting Variants
Skin_Health
Cardiac_Health
Cholesterol_Disorders
Gall_stones
Diabetes
Obesity
Glomerular_Diseases
Thyroid_Disorders
High_Blood_Pressure
Renal_stones
Gastritis
Dementia
Diabetes
AI Score
Concern
No Mutation
Low
Mild
Moderate
Moderate to High
Diabetic Nephropathy
Diabetic Retinopathy
Predisposition for diabetes
Diabetic Nephropathy
rsID
Gene Name
Gene Score
Lit
CH
POS
ref
alt
rs2071126
AVPR2
8
Yes
chrX
153905541
G
A
PDF
Consent
Blood Reports
1
2

DashboardSearch Component

1. Batch Selection:
    - Dropdown to select a batch.
    - Fetches batches from API on mount.
    - Updates UI and fetches report status when a batch is selected.
2. Patient Search:
    - Filters patients dynamically as the user types.
    - Displays all patients if search input is empty or focused.
    - Allows selecting a patient to view details.
3. Patient Availability Toggle:
    - Toggles patient availability via a switch.
    - Prevents toggling if the report is already submitted.
    - Sends updates to the backend and updates local state.

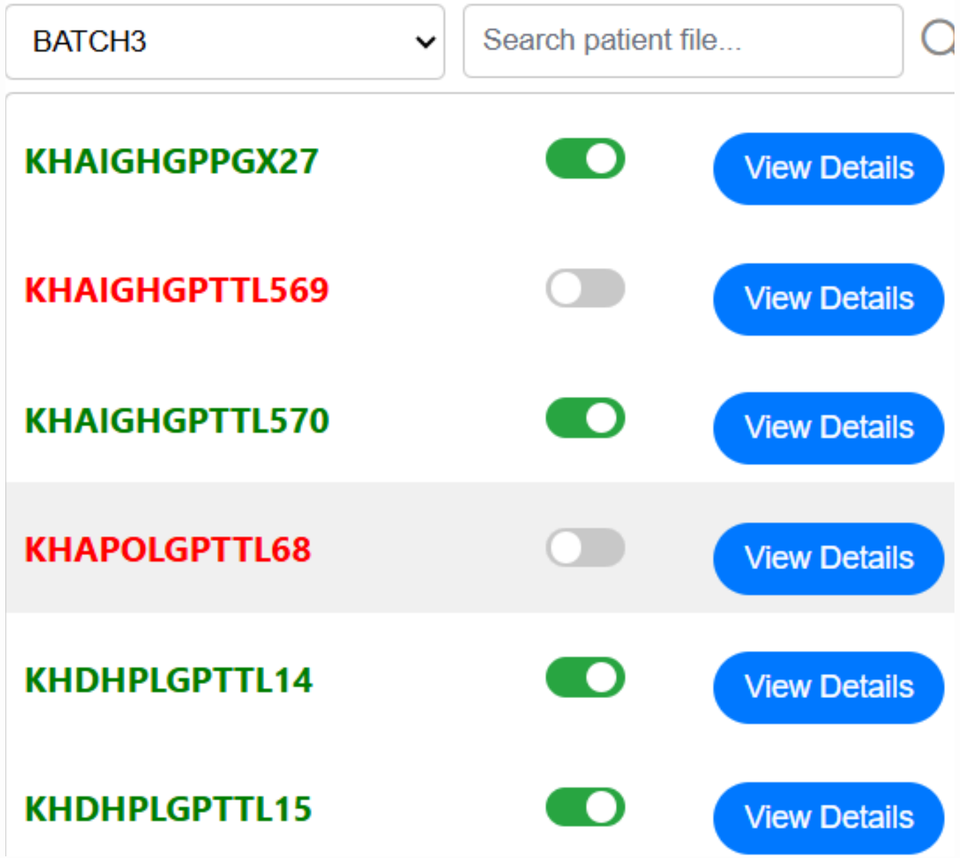
4.Report Status Handling:

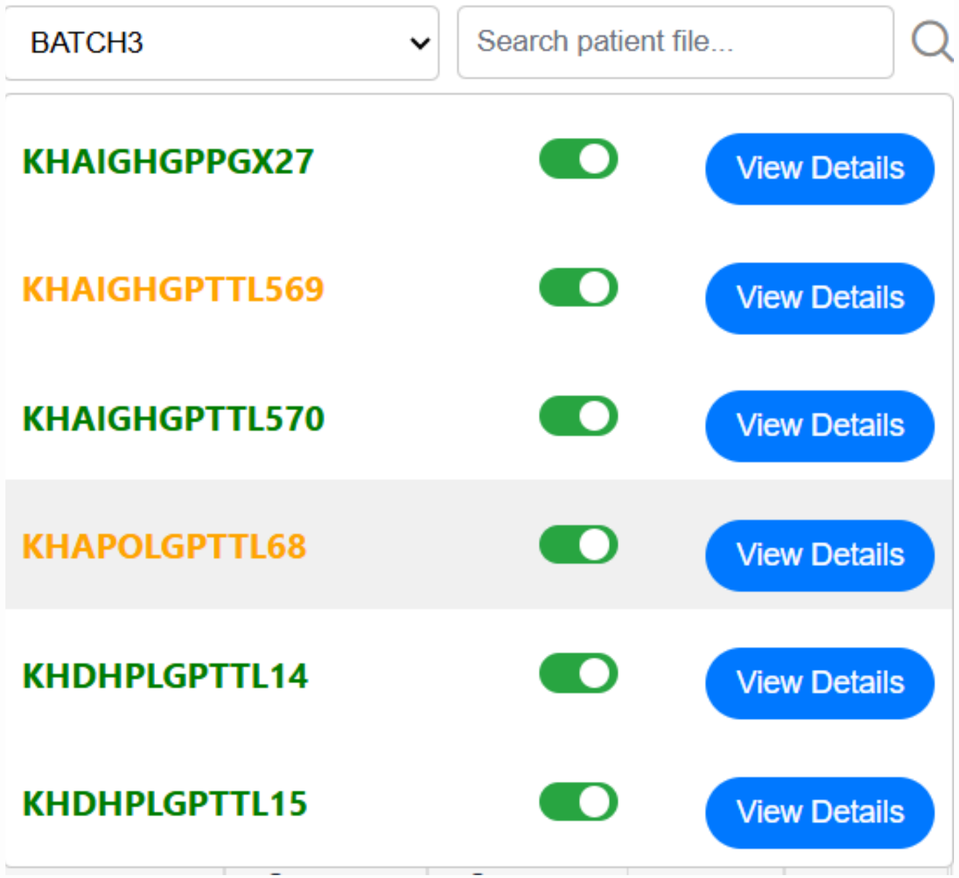
- Fetches and displays report submission status.
- Uses color coding:
  - Green: Report submitted.
  - Orange: Available.
  - Red: Not available.

5.View Details Button:

- Allows users to select a patient and view details.
- Calls onSelectPatient and fetchDataFromAPIs upon selection.

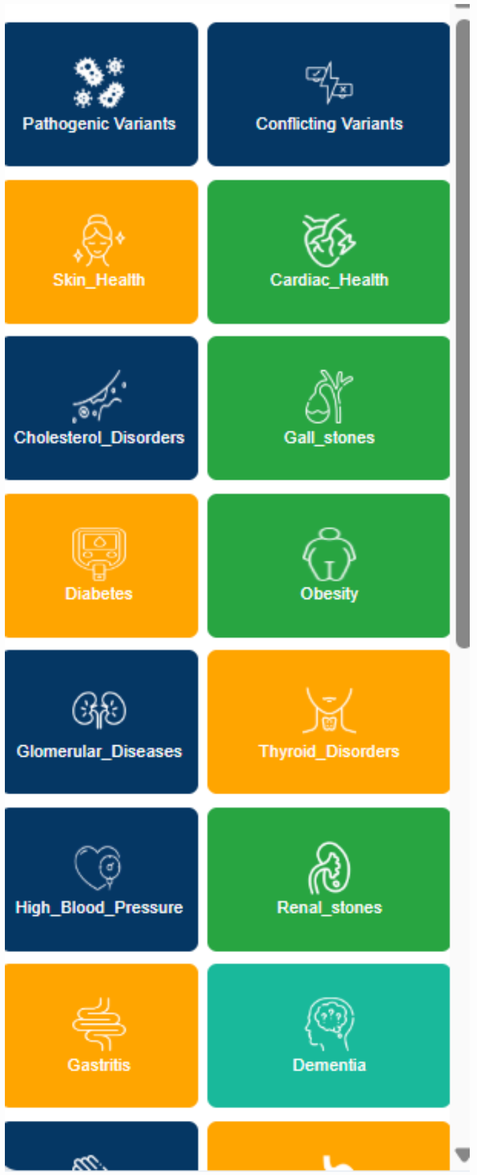
Patient selection , availability status & Report submisssion indication





Condition button colour indication

- If the condition button was coloured in the orange colour it indicates that condition was having concern.
- If the condtion button was coloured in light green colour it indicates currently that condition was selected.
- If the condition button was coloured in the Dark green colour it indicates that condition was viewed and given report.



Full-screen mode

Key Features:

- Full-Screen Toggle: Enter/exit fullscreen mode.
- Severity Selection: Buttons with icons & color-coded levels.
- Concern Checkbox: Mark/unmark a condition as a concern.
- AI Score Display: Toggle AI-generated score visibility.
- No Mutation Button: Indicates absence of mutation.
- Condition Details: Dynamically renders selected conditions.
- Responsive Design: Scrollable and adaptable UI.

Full-screen mode

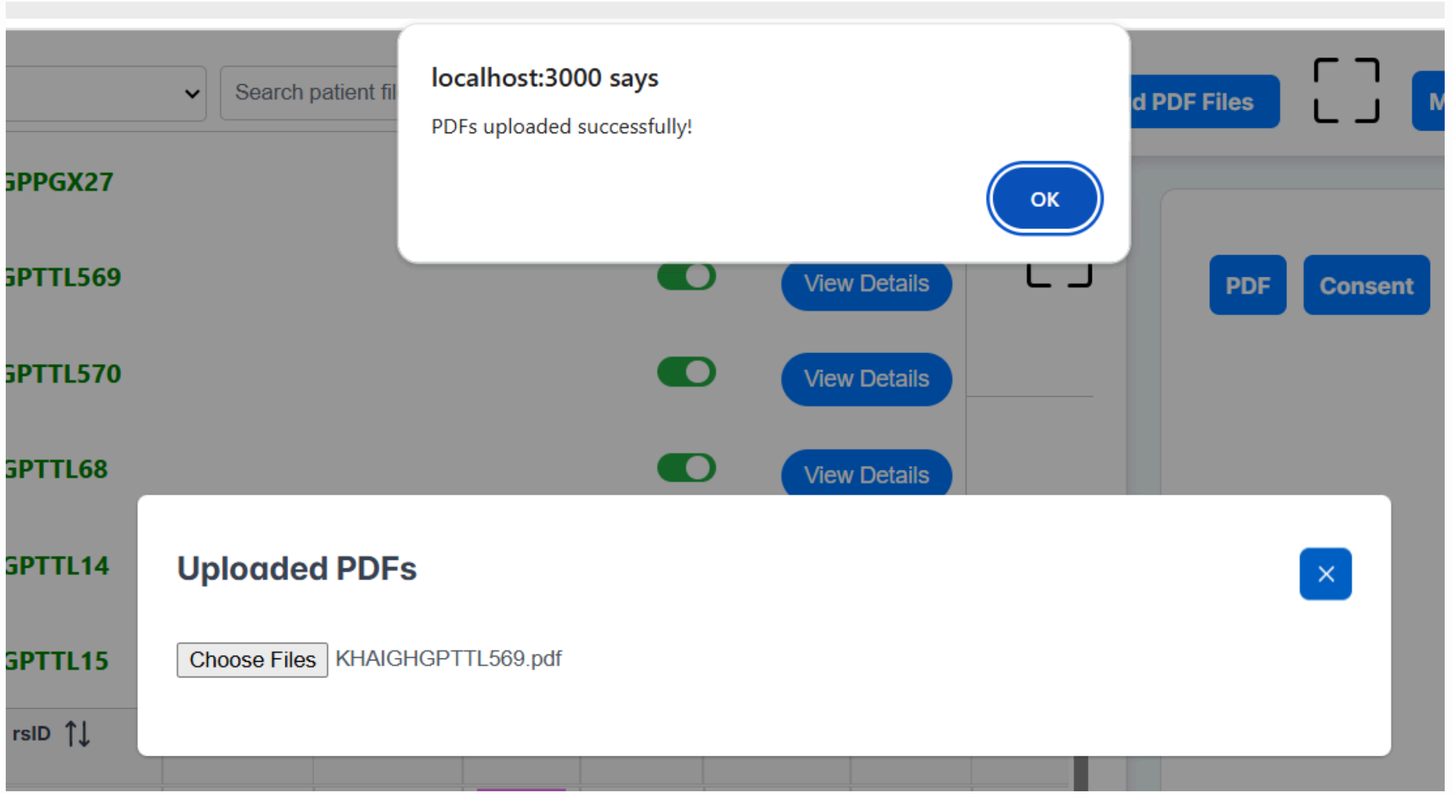
Low Mild Moderate Moderate to High Concern AI Score No Mutation Close

Pancreatitis

Pancreatitis

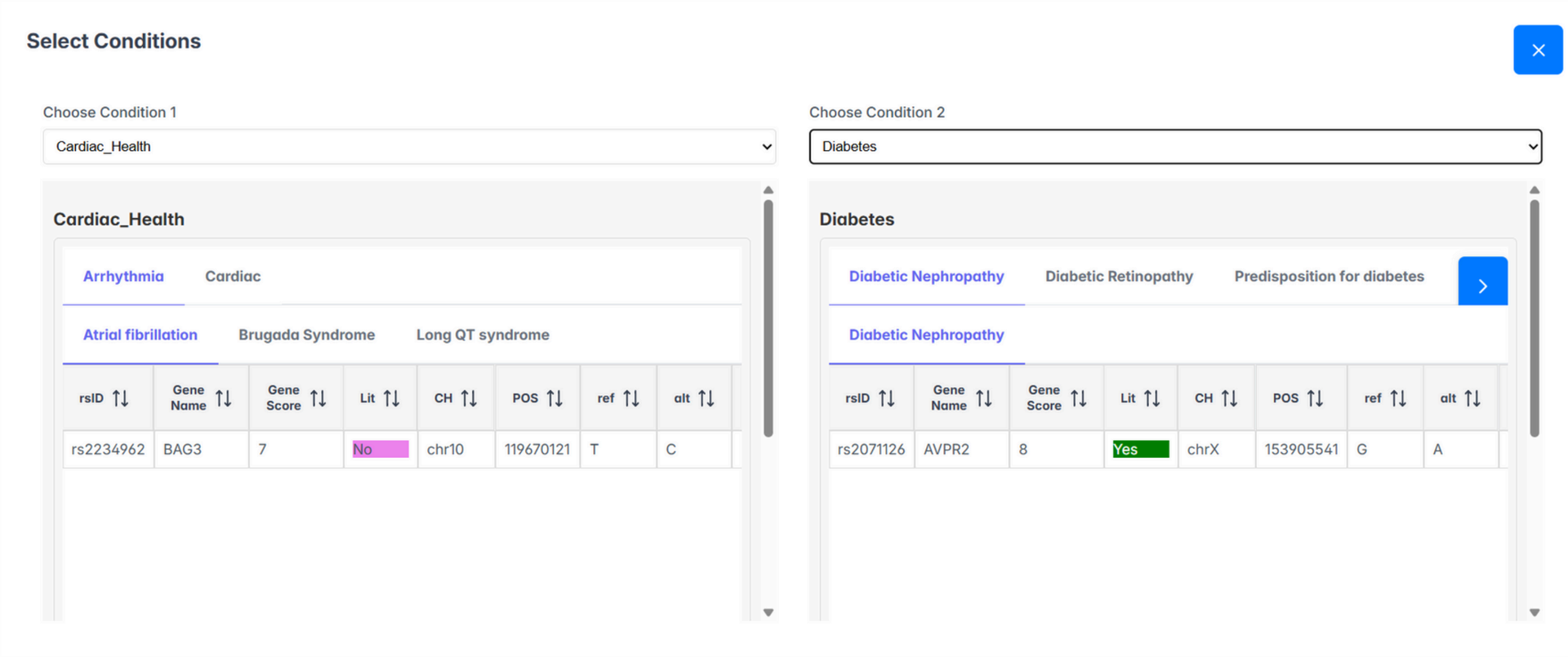
rsID	Gene Name	Gene Score	Lit	CH	POS	ref	alt	Zygosity	Consequence	Conseq score	clin sig	IMPACT
rs202003805	PRSS1	8	Yes	chr7	142750561	C	T	Heterozygous	missense variant	7/10	Pathogenic	MODERATE
rs144422014	PRSS1	8	Yes	chr7	142750675	A	G	Heterozygous	missense variant	7/10	Likely Benign	MODERATE
rs213950	CFTR	8	No	chr7	117559479	G	A	Homozygous Variant	missense variant	7/10	Likely Benign	MODERATE
rs748442280	PRSS1	8	No	chr7	142749516	C	G	Heterozygous	missense variant	7/10	Likely Benign	MODERATE
rs747228052	PRSS1	8	No	chr7	142749524	C	G	Heterozygous	missense variant	7/10	Conflicting	MODERATE
rs200665515	PRSS1	8	No	chr7	142750558	C	G	Heterozygous	missense variant	7/10		MODERATE
rs770782578	PRSS1	8	No	chr7	142750563	C	T	Heterozygous	missense variant	7/10	Likely Benign	MODERATE
rs138464021	PRSS1	8	No	chr7	142750660	G	T	Heterozygous	missense variant	7/10	Benign	MODERATE
rs149246646	PRSS1	8	No	chr7	142750672	T	A	Heterozygous	missense variant	7/10		MODERATE
rs148440491	PRSS1	8	No	chr7	142750676	C	G	Heterozygous	missense variant	7/10		MODERATE
rs147366981	PRSS1	8	No	chr7	142750680	C	T	Heterozygous	stop gained	10/10	Conflicting	HIGH
rs757111793	PRSS1	8	No	chr7	142751776	G	A	Heterozygous	missense variant	7/10	Uncertain Significance	MODERATE
rs750348889	PRSS1	8	No	chr7	142751865	C	A	Heterozygous	missense variant	7/10	Likely Benign	MODERATE
rs199507985	PRSS1	8	No	chr7	142751871	G	A	Heterozygous	missense variant	7/10	Conflicting	MODERATE
rs778568523	PRSS1	8	No	chr7	142751878	A	T	Heterozygous	missense variant	7/10	Uncertain Significance	MODERATE
rs1373631104	PRSS1	8	No	chr7	142751879	G	T	Heterozygous	missense variant	7/10	Uncertain Significance	MODERATE
rs1232891794	PRSS1	8	No	chr7	142752476	G	C	Heterozygous	missense variant	7/10	Uncertain Significance	MODERATE
rs758254763	PRSS1	8	No	chr7	142752490	G	A	Heterozygous	missense variant	7/10		MODERATE
rs1240508430	PRSS1	8	No	chr7	142752505	G	T	Heterozygous	stop gained	10/10	Uncertain Significance	HIGH
rs1468060476	PRSS1	8	No	chr7	142752506	G	T	Heterozygous	missense variant	7/10	Uncertain Significance	MODERATE
rs1348773645	PRSS1	8	No	chr7	142752522	C	G	Heterozygous	missense variant	7/10	Uncertain Significance	MODERATE
rs200902389	PRSS1	8	No	chr7	142752913	G	A	Heterozygous	missense variant	7/10	Benign	MODERATE

PDF Upload



- Added one file upload button in the navbar that allows the user to upload the pdf reports like Blood-work, Consent, directly into the database.

Multiconditions Selection



- Added one Multicondition button in the navabar which allows the user to view the two condtions one patient at a time.

PDF Viewer

PDF Display:

- It loads and displays a multi-page PDF document.
- The current page is "1 / 44," indicating a total of 44 pages.

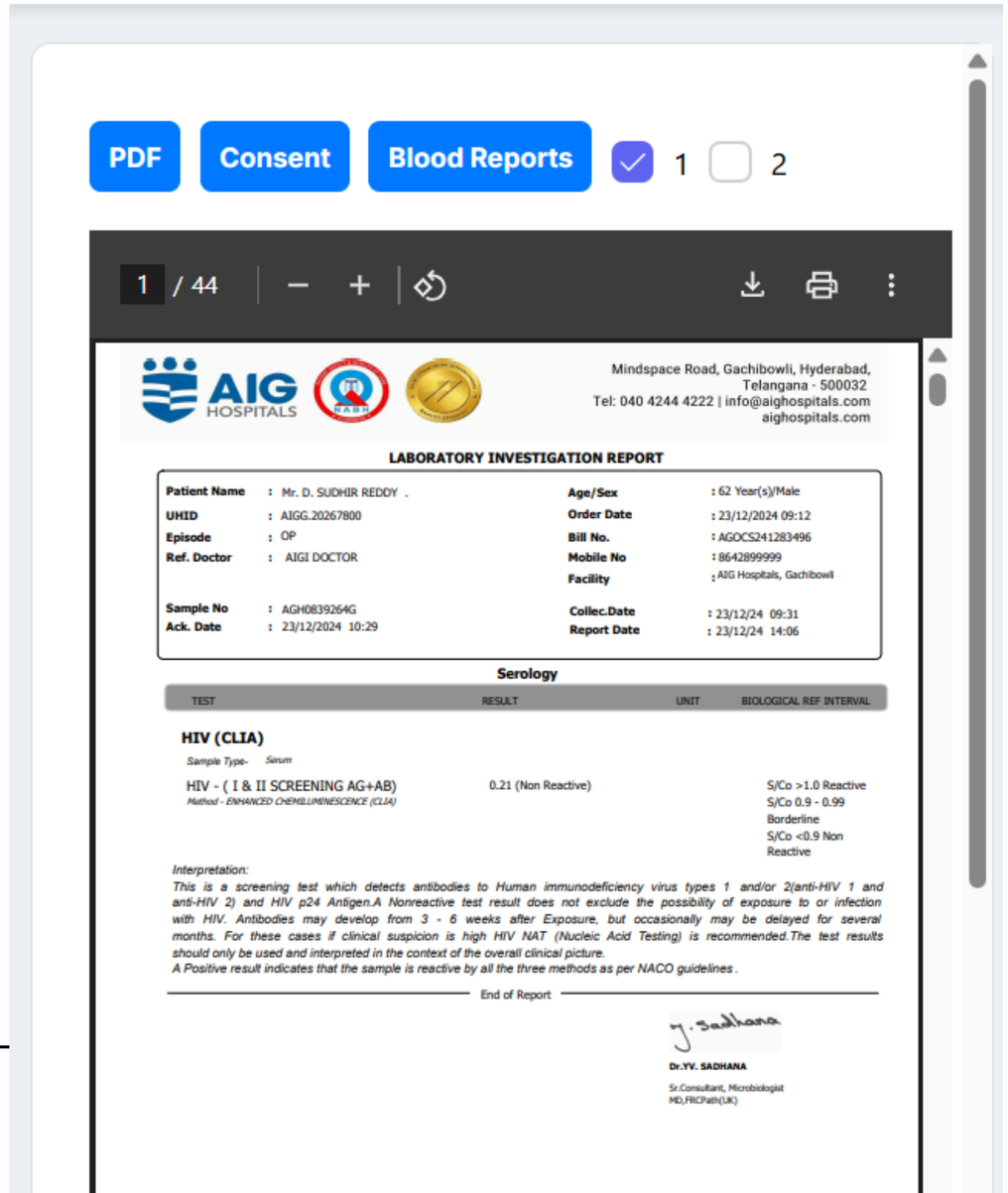
Navigation Controls:

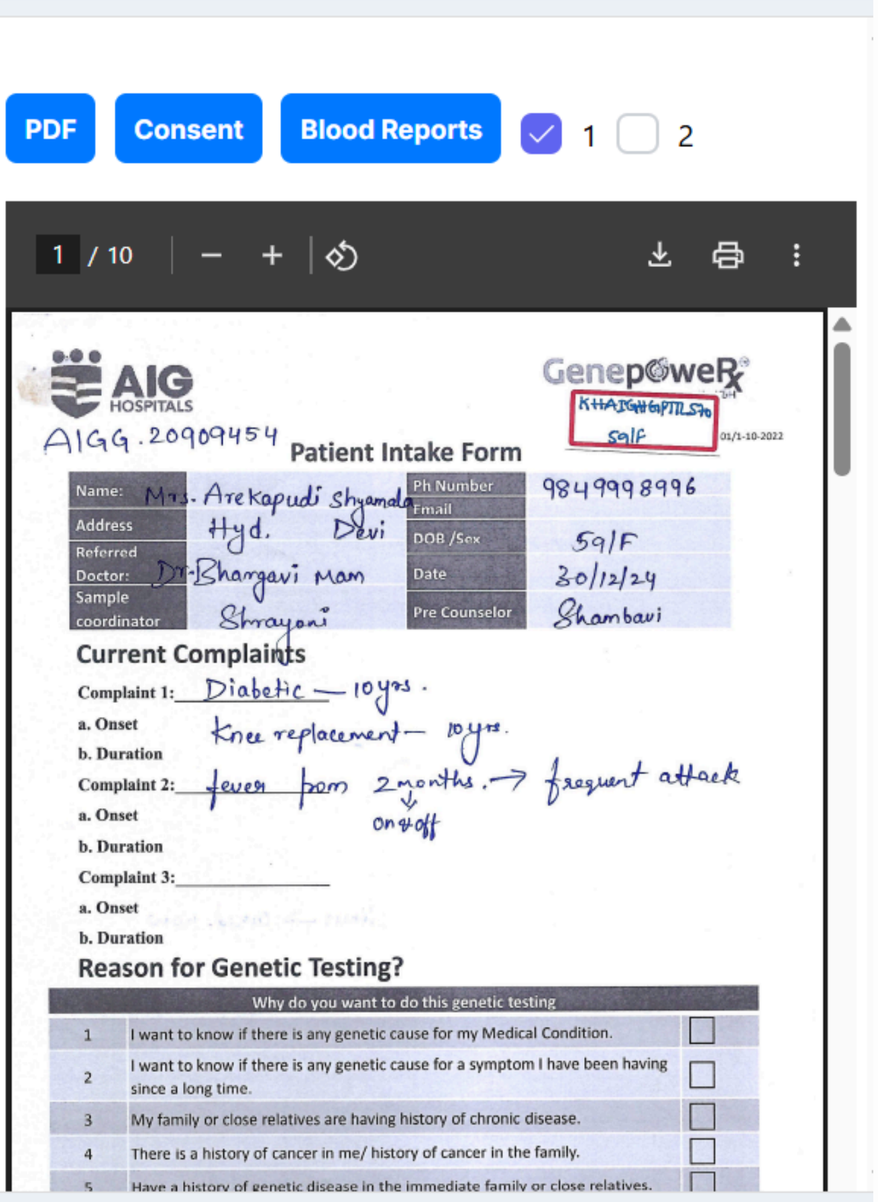
- Buttons to move between pages (+ and - zoom controls).
- A refresh/reset button to reload the document.

Download & Options:

- A download button (down arrow icon) to save the PDF.
- A settings/menu button (three dots icon) for more options.
- Checkboxes & Buttons:
- Buttons labeled PDF, Consent, Blood Reports to categorize documents.
- Scrollable View:
- A scroll bar on the right allows vertical navigation.

PDF Viewer


PDF
Consent
Blood Reports
1
2
1 / 44
AIG HOSPITALS
Mindspace Road, Gachibowli, Hyderabad, Telangana - 500032
Tel: 040 4244 4222 | info@aighospitals.com
aighospitals.com
LABORATORY INVESTIGATION REPORT
Patient Name : Mr. D. SUDHIR REDDY .
UHID : AIGG.20267800
Episode : OP
Ref. Doctor : AIGI DOCTOR
Age/Sex : 62 Year(s)/Male
Order Date : 23/12/2024 09:12
Bill No. : AGOCS241283496
Mobile No : 8642899999
Facility : AIG Hospitals, Gachibowli
Sample No : AGH0839264G
Ack. Date : 23/12/2024 10:29
Collec.Date : 23/12/24 09:31
Report Date : 23/12/24 14:06
Serology
TEST
RESULT
UNIT
BIOLOGICAL REF INTERVAL
HIV (CLIA)
Sample Type- Serum
HIV - (I & II SCREENING AG+AB)
Method - ENHANCED CHEMILUMINESCENCE (CLIA)
0.21 (Non Reactive)
S/Co >1.0 Reactive
S/Co 0.9 - 0.99 Borderline
S/Co <0.9 Non Reactive
Interpretation:
This is a screening test which detects antibodies to Human immunodeficiency virus types 1 and/or 2(anti-HIV 1 and anti-HIV 2) and HIV p24 Antigen.A Nonreactive test result does not exclude the possibility of exposure to or infection with HIV. Antibodies may develop from 3 - 6 weeks after Exposure, but occasionally may be delayed for several months. For these cases if clinical suspicion is high HIV NAT (Nucleic Acid Testing) is recommended.The test results should only be used and interpreted in the context of the overall clinical picture.
A Positive result indicates that the sample is reactive by all the three methods as per NACO guidelines .
End of Report
Dr.YV. SADHANA
Sr.Consultant, Microbiologist
MD,FRCPath(UK)


PDF
Consent
Blood Reports
1
2
1 / 10
AIG HOSPITALS
GenepoweRx
KHAIGHGPTIL570
Self
01/1-10-2022
AIGG.20909454
Patient Intake Form
Name: Mrs. Arekapudi Shyamala Devi
Address Hyd.
Referred Doctor: Dr. Bhargavi Mam
Sample coordinator Shrayani
Ph Number 9849998996
Email
DOB /Sex 59/F
Date 30/12/24
Pre Counselor Shambavi
Current Complaints
Complaint 1: Diabetic — 10yrs.
a. Onset
b. Duration Knee replacement — 10yrs.
Complaint 2: fever from 2 months. → frequent attacks
a. Onset on & off
b. Duration
Complaint 3:
a. Onset
b. Duration
Reason for Genetic Testing?
Why do you want to do this genetic testing
1 I want to know if there is any genetic cause for my Medical Condition.
2 I want to know if there is any genetic cause for a symptom I have been having since a long time.
3 My family or close relatives are having history of chronic disease.
4 There is a history of cancer in me/ history of cancer in the family.
5 Have a history of genetic disease in the immediate family or close relatives.

Submitting Patient Reports Content:

- **Functionality:**
  - Users can submit patient reports by filling out a form with necessary details such as patient ID, batch, and report data.
  - Upon submission, the data is stored in MongoDB.
  - An Excel file is generated from the submitted data.
  - The generated Excel file is sent via email to specified recipients.
  - The file is deleted from the server after the email is sent.

Submitting Patient Report

Submitted Reports in Email

KHAIGHGPPGX27_Scoring_chart.xlsx

Open with

	A	B	C	D	E	F	G	H	I	J	K	L
1	dical Conditi	Low	Low to Mild	Mild	ld to Modera	Moderate	oderate to Hi	High	concerns	No Mutations	AI Score	Reason
2	Cardiac_Hea	y							y	y	Moderate to	nothing just
3	Cholesterol_Disorders					y			y		Mild	nothing just
4	Diabetes	y							y	y	Moderate	test
5	High_Blood_Pressure					y			y		Low	last
6	Gastritis			y					y		Moderate	final
7	Glomerular_	y							y	y	Mild	nothing
8	Gut_Health	y							y		Moderate to	final
9	Headaches	y							y		Moderate	normal testi
10												
11												
12												
13												
14												
15												

LIVE DEMO