BADBIR Dataset Documentation

Introduction

The British Association of Dermatologists Biologics and Immunomodulators Register (BADBIR) dataset is a comprehensive database designed to track patients with psoriasis who are receiving biologic therapies. The database captures detailed information about patients, their treatments, adverse events, quality of life metrics, and clinical outcomes. This documentation provides an overview of each table in the database and describes the relationships between them.

Table Overview and Column Descriptions

Patient

Purpose: Stores core demographic information about patients in the registry.

Column Name	Description	Relationships
patientid	Unique identifier for each patient	Primary key; referenced by PatientCohortHistory, PatientComorbidity
dateofbirth	Patient's date of birth	-
dateconsented	Date when patient consented to be in the registry	-
ageAtConsent	Patient's age when they consented	-
deathDate	Date of patient's death, if applicable	-
genderid	Foreign key to gender lookup	-
gender	Patient's gender	-

PatientCohortHistory

Purpose: Tracks which cohort a patient belongs to and provides historical information about their enrollment.

Column Name	Description	Relationships
chid	Unique identifier for cohort history entry	Primary key; referenced by PatientCohortTracking
patientid	Patient identifier	Foreign key to Patient table
studyNo	Study number assigned to the patient	-
cohortid	Identifier for the cohort	-
Cohort	Description of the cohort	-
currentCentreID	ID of the current healthcare center	-
registrationCentreID	ID of the registration healthcare center	-
skintypeid	ID for skin type classification	-
skintype	Description of the patient's skin type	-

PatientCohortTracking

Purpose: Tracks patient follow-up visits and status within their cohort.

Column Name	Description	Relationships
FupId	Follow-up ID	Primary key; referenced by multiple tables
chid	Cohort history ID	Foreign key to PatientCohortHistory
fupcode	Follow-up code	-
fupCentreID	Center ID where follow-up occurred	-
dateentered	Date when data was entered	-
psoriaticarthiritisonset	Whether psoriatic arthritis has onset	-
psoriaticarthiritisonsetdate	Date of psoriatic arthritis onset	-
haspsoriaticarthiritis	Whether patient has psoriatic arthritis	-

PatientPsoriasis

Purpose: Records detailed information about a patient's psoriasis condition, including type and onset information.

Column Name	Description	Relationships
FupId	Follow-up ID	Foreign key to PatientCohortTracking
past_chronic_plaque	History of chronic plaque psoriasis	-
past_chronic_plaque_small	History of small plaques	-
past_chronic_plaque_large	History of large plaques	-
past_seborrhoeic	History of seborrhoeic psoriasis	-
past_flexural	History of flexural involvement	-
past_scalp	History of scalp involvement	-
past_palms	History of palmoplantar involvement	-
past_nails	History of nail involvement	-
past_nails_number	Number of nails affected historically	-
past_erythrodermic	History of erythrodermic psoriasis	-
past_guttate	History of guttate psoriasis	-
past_unstable	History of unstable psoriasis	-
past_gen_pustular	History of generalized pustular psoriasis	-
past_other	History of other psoriasis types	-
past_loc_pustular	History of localized pustular psoriasis	-
past_other_type	Description of other past psoriasis types	-
unstable	Current unstable psoriasis	-
chronic_plaque	Current chronic plaque psoriasis	-
chronic_plaque_small	Current small plaques	-
chronic_plaque_large	Current large plaques	-
seborrhoeic	Current seborrhoeic psoriasis	-
flexural	Current flexural involvement	-
scalp	Current scalp involvement	-
palms	Current palmoplantar involvement	-
nails	Current nail involvement	-
nails_number	Number of nails currently affected	-
erythrodermic	Current erythrodermic psoriasis	-
guttate	Current guttate psoriasis	-
gen_pustular	Current generalized pustular psoriasis	-
loc_pustular	Current localized pustular psoriasis	-
loc_pustular_acro	Current acrodermatitis continua	-
loc_pustular_palmo	Current palmoplantar pustulosis	-
other	Current other psoriasis types	-
other_type	Description of other current psoriasis types	-

Column Name	Description	Relationships
yonset	Year of psoriasis onset	-
yderm	Year first seen by dermatologist	-
inflamarth	Inflammatory arthritis	-
famhist	Family history of psoriasis	-

PatientPASIScores

Purpose: Records Psoriasis Area and Severity Index (PASI) scores for patients at different follow-up points.

Column Name	Description	Relationships
PASIid	Unique identifier for PASI score entry	Primary key
FupId	Follow-up ID	Foreign key to PatientCohortTracking
pasi	PASI score	-
psglobid	Global psoriasis assessment ID	-
psglobdescription	Description of global psoriasis assessment	-
psglob_not_supplied	Indicator if global assessment not provided	-
bsa	Body Surface Area affected (%)	-
pasidate	Date PASI was measured	-

PatientComorbidity

Purpose: Records comorbid conditions for patients in the registry.

Column Name	Description	Relationships
patcoid	Unique identifier for comorbidity entry	Primary key
FupId	Follow-up ID	Foreign key to PatientCohortTracking
comorbiditytypeid	Comorbidity type ID	-
comorbiditytype	Description of comorbidity type	-
comorbidonset	Date of comorbidity onset	-
comorbidonsetestimated	Whether onset date is estimated	-
meddraPT	MedDRA Preferred Term	Related to AdverseEventMeddra
meddraHLT	MedDRA High Level Term	Related to AdverseEventMeddra
meddraHLGT	MedDRA High Level Group Term	Related to AdverseEventMeddra
meddraSOC	MedDRA System Organ Class	Related to AdverseEventMeddra

PatientHAQ

Purpose: Captures Health Assessment Questionnaire results, measuring patients' functional status and ability to perform daily activities, especially relevant for patients with psoriatic arthritis.

Column Name	Description	Relationships
FupId	Follow-up ID	Foreign key to PatientCohortTracking
missingdata	Whether data is missing in the assessment	-
missingdatadetails	Details about missing data	-
dresself	Score for ability to dress oneself	-
shampoo	Score for ability to shampoo hair	-
standchair	Score for ability to stand from a chair	-
bed	Score for ability to get in/out of bed	-
cutmeal	Score for ability to cut food	-
liftglass	Score for ability to lift a glass	-
openmilk	Score for ability to open a milk carton	-
walkflat	Score for ability to walk on flat ground	-
climbsteps	Score for ability to climb steps	-
cane	Whether patient uses a cane	-
crutches	Whether patient uses crutches	-
walker	Whether patient uses a walker	-
wheelchair	Whether patient uses a wheelchair	-
specialutensils	Whether patient uses special utensils	-
specialchair	Whether patient uses a special chair	-
dressingdetails	Details about dressing difficulties	-
dressing	Dressing and grooming category score	-
grooming	Personal grooming category score	-
rising	Rising category score	-
eating	Eating category score	-
walking	Walking category score	-
wash	Hygiene category score	-
drybath	Score for ability to dry after bathing	-
toilet	Score for toilet use	-
reachabove	Score for reaching above	-
bend	Score for bending down	-
cardoor	Score for opening car doors	-
openjar	Score for opening jars	-
turntaps	Score for turning taps/faucets	-
shop	Score for shopping	-
getincar	Score for getting in/out of car	-
housework	Score for doing housework	-

Column Name	Description	Relationships
loo	Score for toilet use	-
lift	Score for lifting items	-
bathseat	Whether patient uses a bath seat	-
bathrail	Whether patient uses bath rails	-
longreach	Whether patient uses long-reach tools	-
jaropener	Whether patient uses jar opener devices	-
deviceother	Whether patient uses other devices	-
hygiene	Hygiene score	-
reach	Reach score	-
gripping	Grip strength score	-
errands	Errands and chores score	-
totalscore	Total HAQ score	-
HAQscore	Calculated HAQ disability index	-
datescored	Date when HAQ was completed	-

AdverseEvents

Purpose: Tracks adverse events experienced by patients in the registry.

Column Name	Description	Relationships
FupId	Follow-up ID	Foreign key to PatientCohortTracking
FupAEID	Unique identifier for adverse event	Primary key; referenced by AdverseEventESIs and ESI tables
aestartdate	Start date of adverse event	-
startestimated	Whether start date is estimated	-
aestopdate	End date of adverse event	-
endestimated	Whether end date is estimated	-
ongoing	Whether adverse event is ongoing	-
isSerious	Whether event is considered serious	-
isHospitalised	Whether patient was hospitalized	-
hospAdmitDate	Hospital admission date	-
hospDischargeDate	Hospital discharge date	-
hospAdmitDateEstimated	Whether admission date is estimated	-
hospDischargeDateEstimated	Whether discharge date is estimated	-
ongoingconfirmedfupno	Follow-up number when ongoing status confirmed	-

AdverseEventMeddra

Purpose: Provides MedDRA classification of adverse events for standardized medical terminology.

Column Name	Description	Relationships
fupaeid	Adverse event ID	Foreign key to AdverseEvents
meddraPT	MedDRA Preferred Term	-
meddraHLT	MedDRA High Level Term	-
meddraHLGT	MedDRA High Level Group Term	-
meddraSOC	MedDRA System Organ Class	-
pt_code	Code for Preferred Term	-
hlt_code	Code for High Level Term	-
hlgt_code	Code for High Level Group Term	-
soc_code	Code for System Organ Class	-

AdverseEventESIs

Purpose: Links adverse events to Events of Special Interest (ESIs) which require additional monitoring.

Column Name	Description	Relationships
fupaeid	Adverse event ID	Foreign key to AdverseEvents
AeEsiId	Unique identifier for ESI record	Primary key; referenced by ESI specific tables
esiid	Event of Special Interest ID	-
esi	Description of the ESI	-
esiformwaived	Whether ESI form requirement was waived	-
hasESIForm	Whether ESI form exists	-
hasfilledesiform	Whether ESI form is filled	-

ESI Tables (ESI_Anaemia, ESI_Cancer, etc.)

Purpose: Each table captures specific information about different types of Events of Special Interest, providing detailed clinical data about these events.

For example, in **ESI_Anaemia**:

Column Name	Description	Relationships
PK_ID	Primary key for ESI record	Primary key
AeEsiID	Adverse event ESI ID	Foreign key to AdverseEventESIs
diagnosismade	Whether diagnosis was confirmed	-
HB	Hemoglobin level	-
neutrophil	Neutrophil count	-
platelet	Platelet count	-
cytopaenia	Presence of cytopaenia	-
bonemarrow	Whether bone marrow examination was done	-
bonemarrowresults	Results of bone marrow examination	-
complicationid	Complication ID	-
Complication	Description of complication	-
completeddate	Date form was completed	-

(Note: Each ESI table has its own specific columns relevant to that particular condition)

Quality of Life Assessment Tables

Purpose: These tables (PatientDLQI, PatientCDLQI, PatientEuroQol, PatientHAQ) capture various quality of life assessments for patients.

For example, in **PatientDLQI** (Dermatology Life Quality Index):

Column Name	Description	Relationships
FupId	Follow-up ID	Foreign key to PatientCohortTracking
diagnosis	Diagnosis at time of assessment	-
itchsore_score	Score for itching/soreness	-
embsc_score	Score for embarrassment/self-consciousness	-
shophg_score	Score for shopping/home/garden activities	-
clothes_score	Score for clothes impact	-
socleis_score	Score for social/leisure activities	-
sport_score	Score for sports impact	-
workstud_score	Score for work/study impact	-
workstudno_score	Score for work/study problems	-
partcrf_score	Score for partner/relative/friend relationship	-
sexdif_score	Score for sexual difficulties	-
treatment_score	Score for treatment problems	-
total_score	Total DLQI score	-
skipBreakup	Whether breakdown was skipped	-
datecomp	Date completed	-

PatientLabValues and PatientLabValuessd

Purpose: Store laboratory test results for patients.

Column Name	Description	Relationships
FupId	Follow-up ID	Foreign key to PatientCohortTracking
haemo	Hemoglobin value	-
whitecell	White blood cell count	-
platelet	Platelet count	-
creatinine	Creatinine level	-
transam	Transaminase level	-
cholest	Cholesterol level	-
trigly	Triglyceride level	-
triglyyes	Whether triglyceride was measured	-
hdl	High-density lipoprotein level	-
fbcdate	Full blood count date	-
creatininedate	Creatinine test date	-
altdate	ALT test date	-
lipidsdate	Lipids test date	-
hasHaemo	Whether hemoglobin was measured	-
hasWhitecell	Whether white cell count was measured	-
hasPlatelet	Whether platelet count was measured	-
hasCreatinine	Whether creatinine was measured	-
hasTransam	Whether transaminase was measured	-
hasCholest	Whether cholesterol was measured	-
hasTriglycride	Whether triglyceride was measured	-
hasHdl	Whether HDL was measured	-

PatientLifestyle

Purpose: Records lifestyle factors that may influence disease status or treatment outcomes.

Column Name	Description	Relationships
FupId	Follow-up ID	Foreign key to PatientCohortTracking
workstatusid	Work status ID	Foreign key to WorkStatusLkp
ethnicityid	Ethnicity ID	Foreign key to EthnicityLkp
eversmoked	Whether patient ever smoked	-
eversmokednumbercigsperday	Average cigarettes per day when smoked	-
agestart	Age started smoking	-
agestop	Age stopped smoking	-
currentlysmoke	Whether currently smoking	-
currentlysmokenumbercigsperday	Current cigarettes per day	-
drinkalcohol	Whether patient drinks alcohol	-
drnkunitsavg	Average alcohol units consumed	-
height	Height in cm	-
weight	Weight in kg	-
waist	Waist circumference in cm	-
livetropical	Whether lived in tropical area	-
outdooroccupation	Whether has outdoor occupation	-

PatientUVTherapy

Purpose: Records ultraviolet therapy history for patients.

Column Name	Description	Relationships
uvtherapyid	Unique ID for UV therapy record	Primary key
FupId	Follow-up ID	Foreign key to PatientCohortTracking
uvtherapytypeid	UV therapy type ID	-
uvtherapytype	Description of UV therapy type	-
uvcourses	Number of courses received	-
uvtreatments	Number of treatments received	-
uvcumulativedose	Cumulative dose received	-
therapyknown	Whether therapy details are known	-

Lookup Tables

Purpose: Provide standardized reference data for other tables.

EthnicityLkp:

Column Name	Description	Relationships
ethnicityid	Unique ethnicity identifier	Referenced by PatientLifestyle
ethnicity	Description of ethnicity	-

WorkStatusLkp:

Column Name	Description	Relationships
worstatuskid	Work status ID	Referenced by PatientLifestyle
workstatus	Description of work status	-

SAEClassification:

Column Name	Description	Relationships
saemedsubsubcatid	Sub-subcategory ID	Primary key
saesubsubcategory	Sub-subcategory description	-
saemedsubcatid	Subcategory ID	-
saesubcategory	Subcategory description	-
saemedcatid	Category ID	-
saecategory	Category description	-
SAEMedicalID	Medical ID	-

SaeClinicianlkp:

Column Name	Description	Relationships
saeid	SAE ID	Primary key
saecode	SAE code	-

Database Structure Overview

The BADBIR database is structured around several key entity types:

1. **Patient information**: Core tables like Patient, PatientCohortHistory, and PatientCohortTracking that maintain demographic and enrollment data.
2. **Clinical assessments**: Tables like PatientPASIScores that track disease severity and clinical outcomes.
3. **Adverse events tracking**: AdverseEvents, AdverseEventMeddra, and AdverseEventESIs that monitor safety outcomes.
4. **Specialized ESI forms**: Multiple ESI-specific tables (ESI_Anaemia, ESI_Cancer, etc.) that collect detailed information about events of special interest.

5. **Quality of life metrics**: Tables like PatientDLQI, PatientCDLQI, PatientEuroQol that assess the impact of disease and treatment on patients' lives.
6. **Laboratory and clinical data**: PatientLabValues, PatientComorbidity that track medical test results and comorbid conditions.
7. **Lifestyle factors**: PatientLifestyle data that may influence disease or treatment outcomes.
8. **Treatment history**: Information about treatments like UV therapy in PatientUVTherapy.

The central relationship in the database revolves around the PatientCohortTracking table's FupId (follow-up ID), which links patient visits to clinical assessments, adverse events, and quality of life measures collected during those visits.

Summary

The BADBIR database provides a comprehensive framework for tracking patients with psoriasis who are receiving biologic and immunomodulatory therapies. The structure allows for longitudinal monitoring of disease activity, treatment effectiveness, adverse events, and quality of life impact over time. The extensive collection of data enables researchers to analyze real-world evidence about these treatments and their impact on patients with psoriasis.