

DEWS Glossary

Report of the 2007 International Dry Eye WorkShop (DEWS) Glossary

- ACR50, ACR70** indices of physical and joint function developed by the American College of Rheumatology to assess functional performance and limitation due to rheumatic disease.
- ADDE** Aqueous Deficient Dry eye, dry eye that is due to decreased secretion of tear fluid from the lacrimal glands.
- AKC** atopic keratoconjunctivitis, an allergic condition associated with atopic disease productive of inflammation of the ocular surface.
- ARDE** Age-Related Dry Eye, dry eye disease that is concurrent with aging.
- ATD** Aqueous Tear Deficiency.
- ATS** Artificial Tear Substitute
- BUT** Fluorescein Break-Up Time or Test.
- CAE** Controlled Adverse Environment, an environment designed and constructed to provide an environmental challenge to aggravate a clinical condition under study.
- CCLR** Centre for Contact Lens Research, University of Waterloo, Ontario.
- Challenge clinical trial** a clinical trial that observes the effect of a treatment or intervention under environmental or activity conditions that stress or challenge a particular physical or mental condition.
- CIC** Conjunctival Impression Cytology.
- CLEK** Collaborative Longitudinal Study of Keratoconus.
- CPT** Conjunctival Provocation Test.
- CPT code** current procedure terminology that assigns a unique numerical code to procedures performed for conditions listed in the ICD-9 codified disease list.
- CVS** Computer Vision Syndrome, the symptoms and signs produced by prolonged use of a videodisplay terminal and computer that results in decreased blink, increased tear instability and symptoms of discomfort and fluctuation in vision.
- DEQ** The Dry Eye Questionnaire.
- DES** Dry Eye Syndrome, that collection of clinical conditions that produce abnormalities of the tears and ocular surface, usually by decreased tear production or increased tear evaporation.
- Dysfunctional tear syndrome** the term recommended by the International Delphi Panel to describe abnormalities of the tear film and the consequences to the ocular surface.
- ECP** Eosinophil Cationic Protein.
- EDE** Evaporative Dry Eye, dry eye that is due to increased evaporation of the tear fluid from the surface of the eye.
- Environmental clinical trial** a clinical trial that observes the effect of a treatment or intervention under the ambient environmental conditions present.
- EQ-5D** a standardized questionnaire for use as a measure of health outcomes.
- Equipoise (clinical research)** a state of uncertainty regarding whether alternative health care interventions will confer more favorable outcomes, including balance of benefits and harms. Under the principle of equipoise, a patient should be enrolled in a randomized controlled trial only if there is substantial uncertainty (an expectation for equal likelihood) about which intervention will benefit the patient most.
- FBUT** Fluorescein Break-Up Time or Test.
- FCT** Fluorescein Clearance Test. A test of tear turnover; see TCR.
- FVA** Functional Visual Acuity, a measure of visual acuity during a tightly controlled period of time or environmental circumstance that assesses visual acuity with the subject being unable to compensate by blinking or adjustment to a visual challenge.
- GCP** Good Clinical Practices, those features of conducting a clinical trial that are accepted as proper methods for conducting a clinical trial.
- Goblet cells** specialized cells in the ocular surface epithelium that secrete soluble and gel-forming mucins onto the ocular surface and into the tear film.
- GVHD** Graft Vs Host Disease, inflammation caused by engrafted immunocompetent cells that recognize as foreign and attack cells of the host.
- HADS** Hospital Anxiety and Depression Scale, a scale developed to evaluate anxiety and depression.
- HLA** Human Leukocyte Antigen.
- ICAM-1** Intercellular Adhesion Molecule that enables cell-to-cell adhesion. It is often a marker of inflammation.
- ICD-9** International Classification of Disease that assigns a unique numerical code to each disease.
- IDEEL** Impact of Dry Eye on Everyday Life, a set of questions framed to determine the level of interference with activities of daily living produced by dry eye disease.
- IL** Interleukin.
- Incidence** the frequency of occurrence of a condition per total unit of population per period of time (eg, x/100,000/yr).
- International Conference on Harmonization** conference that defined guidelines for ethical conduct of human clinical trials.
- International Dry Eye Workshop (DEWS)** the international group conference that collated evidence-based information describing the clinical condition of dry eye disease, including clinical, basic and clinical research, epidemiology and management of the condition.
- IRB** Institutional Review Board, institutional committee of a defined composition that is responsible for the review of the ethical construction and conduct of a clinical trial in compliance with accepted ethical guidelines.
- ITT** Intention To Treat population, all subjects randomized in a clinical trial based on the original treatment to which they were assigned, regardless of the treatment they actually received or their adherence to the study protocol.
- KCS** Keratoconjunctivitis sicca, the condition of dry eye and inflammation of the ocular surface described by Henrik Sjögren, MD. Now commonly used interchangeably with *dry eye syndrome*.
- La (SSB)** a specific antigen expressed on cells that is a target for antibodies developed by the immune response in Sjögren syndrome
- LASIK** Laser Assisted in-Situ Keratomileusis: the removal of corneal tissue by laser beneath an anterior flap of cornea performed to correct refractive error.
- LFU** Lacrimal Functional Unit, the integrated functional unit comprising the lacrimal system, the ocular surface and its accessory glands and their neural interconnections that is responsible for the maintenance of the tear film and protection of the transparency of the cornea and health of the ocular surface.
- Likert score** a method of grading a subjective symptom or objective sign of disease by use of a categorical scale.
- LINE** LASIK-Induced Neuro Epitheliopathy, a term used to describe the symptom complex of ocular irritation and ocular surface abnormalities following LASIK surgery.
- LIPCOF** Lid Parallel Conjunctival Folds, an indicator of conjunctivochalasis.
- LOCF** Last Observation Carried Forward, a statistical technique to correct for missing information at a data collection point by carrying forward the last clinical observation made prior to the missing data.
- M3** Muscarinic receptor, type 3.
- MAP kinase** Mitogen-Activated Protein kinase
- MBI** Maximum Blink Interval.
- MFI** Multi-dimensional Fatigue Inventory, a questionnaire that catalogs multiple aspects of symptoms contributing to or associated with fatigue.
- MGD** Meibomian Gland Dysfunction
- MHC** Major Histocompatibility Antigens expressed on cells and determining immune recognition in transplantation allograft reaction
- MHT** Menopausal Hormone Therapy, systemic replacement of female sex hormones as a treatment for post-menopausal lack of estrogen and/or other hormones.
- MMP** Matrix Metalloproteinase Proteolytic enzymes formed by tissues and inflammatory cells.
- Mod ITT** Modified Intent to Treat population, all subjects randomized to a clinical trial who received at least one dose of medication or assigned intervention.

Mucins glycoproteins expressed on the ocular surface or secreted into the tear film.

MUC-4 Mucins –soluble:

MUC1, MUC11, MUC-16 Mucins-membrane spanning

MUC5AC the gel-forming mucin secreted by the goblet cells of the ocular surface.

NEI-VFQ NEI Visual Function Questionnaire, a questionnaire developed by the National Eye Institute to evaluate vision function in activities of daily life.

NIBUT Non-Invasive Break-Up Time or Test

Nocebo a treatment or intervention that has no negative direct effect on a condition under treatment.

NSSATD Non-Sjogren Aqueous Tear Deficiency.

NSSDE Non-Sjogren Syndrome-associated Dry Eye, ADDE that occurs in the absence of Sjogren Syndrome.

OPI Ocular Protection Index.

OR odds ratio

OSDI Ocular Surface Disease Index, a set of questions assessing the level of discomfort and interference with activities of daily living produced by ocular surface disease. (Developed by Allergan, Inc for evaluation of dry eye disease).

OSS Ocular Surface System, the contiguous epithelia of the ocular surface which are derived embryologically from the same surface epithelia and which are continuous, through ductal epithelia, with the acinar epithelia of the main and accessory lacrimal glands, the meibomian glands and the nasolacrimal system.

Phenol red thread test measurement of tear volume or change in tear volume with time by observation of the amount of wetting of a phenol red dye impregnated cotton thread placed over the inferior eyelid.

PHS Physicians' Health Study, a large, prospective, long-term epidemiologic study of a cohort of male physicians in the United States

Placebo a treatment or intervention that has no positive direct effect on a condition under treatment.

PP Per Protocol population, all subjects randomized to an assigned treatment or intervention who completed the treatment according to protocol

Predictive value the likelihood that a test will reliably predict the presence of a given abnormality in a population.

Prevalence the frequency of occurrence of a condition or disease in a cross-sectional population sample (eg, x% of an evaluated population)

PRK photorefractive keratectomy: the removal of anterior corneal tissue by laser performed to correct refractive error.

QoL Quality of Life, the features of patient comfort and activity that can be influenced by illness or injury.

RCT Randomized Clinical Trial, a clinical study of two or more treatments or interventions that assigns subjects at random to each of the treatment options.

Regression to the mean a statistical finding that with sequential observations, subject scores tend towards the mean of the original sample.

RK radial keratotomy, incisions made in a radial pattern about the mid-peripheral cornea to correct myopic refractive error.

Ro (SSA) a specific antigen expressed on cells that is a target for antibodies developed by the immune response present in Sjogren Syndrome.

SBUT Symptomatic Tear Film Break-Up Time.

Schirmer test a test to measure change in tear volume (production) by the observed wetting of a standardized paper strip placed over the inferior eyelid over a given period of time.

Schirmer test without anesthetic the test is performed without prior instillation of topical anesthesia to the ocular surface.

Schirmer test with anesthetic the test is performed after prior instillation of a topical anesthetic to the ocular surface.

Secretagogue an agent that stimulates glandular secretion.

Sensitivity the likelihood that a clinical test will detect the presence of a given abnormality in a population.

SF-36 The 36 item Medical Outcome Study Short-Form, a set of 36 questions that evaluate the level of interference with activities of daily living by a disease.

SLE Systemic Lupus Erythematosus.

Specificity the likelihood that a clinical test will identify only the given abnormality in a population.

SSATD Sjogren Syndrome Aqueous Tear Deficiency

SSDE Sjogren Syndrome-associated Dry Eye, ADDE that is associated with and caused by Sjogren Syndrome.

S-TBUD Staring Tear Breakup Dynamics.

Surrogate marker a marker or parameter of measurement that reflects or correlates with a different parameter of disease or tissue alteration. Surrogate markers may be direct or correlative. Direct surrogate markers are those that derive from the same physical or chemical properties as the primary marker. Correlative surrogate markers are those that correlate with the primary marker but can be produced by other mechanisms as well.

TCR Tear Clearance Rate, the rate at which the preocular tear film or an instilled marker of the tear is removed from the tear film by dilution or drainage from the tear volume.

Tear Breakup Time (TBUT also: BUT, FBUT and TFBUT) The time to initial breakup of the tear film following a blink.

TFFL Tear Film Lipid Layer, the most anterior layer of the tear film, composed of meibomian lipids that limit evaporation and stabilize the tear film.

TFI a test of tear dynamics whose value is obtained by dividing the value of the Schirmer test with anesthesia by the tear clearance rate.

TFT Tear Ferning Test, a test that detects dry eye on the basis of tear ferning patterns.

TSAS Tear Stability Analyses System

VAS Visual Analog Scale, a method of grading a subjective symptom or objective sign of disease by use of a measured linear scale.

VFQ-25 NEI-devised Visual Functioning Questionnaire.

VKC Vernal Keratoconjunctivitis, an allergic condition manifested by chronic and episodic inflammation of the ocular surface and papillary reaction of the conjunctiva.

VT-HRQ Vision-Targeted Health-Related Quality of Life, a questionnaire that evaluates QOL activities related to or dependent upon vision.

WHS Women's Health Study, a large, prospective, long-term epidemiologic study of a cohort of women in the United States.

Xerophthalmia A bilateral ocular disease caused by Vitamin A deficiency, characterized by night blindness, xerosis of the ocular surface and keratomalacia.

ABBREVIATIONS USED

↑ = Increase in/increased

↓ = Decrease in/decreased

Δ = Change in/changes to

–/– = Homozygous null mouse

ACAT-1 = Acyl-CoA:cholesterol acyltransferase-1

Auto-AG = Autoantigen

BUT = Breakup time

CALT = Conjunctiva-associated lymphoid tissue

Chr Bleph = Chronic blepharitis

CIC = Cicatrizing disease

Conj = Conjunctiva/conjunctival

Cont lens = Contact lens

DE = Dry eye

DES = Dry eye syndrome

EDA = Ectodermal dysplasia

ENV STR = Environmental stress

epi = Epithelia/epithelial

Epi. Diff/sq metaplasia = Epithelial differentiation/squamous metaplasia

GVHD = Graft-versus-host disease

KCS = Keratoconjunctivitis sicca

Lac = Lacrimal

Meibom = Meibomian

↓MG = Loss of meibomian glands

MGD = Meibomian gland dysfunction

NSS = Non Sjögren's syndrome

NSS/ACQ = Aqueous deficient non Sjögren's Syndrome

Nasolac = Nasolacrimal

NLD = Nasolacrimal duct

RA-MGD = Retinoic acid induced MGD

SCOP = Scopolamine

siRNA = Small interfering RNA

Spont DE = Spontaneous dry eye

SS = Sjogren Syndrome

TALT = Tear duct-associated lymphoid tissue

TBUT = Tear breakup time

Undif KCS = undifferentiated keratoconjunctivitis sicca

↓Vit A = Vitamin A-deficient

–Vit A = Vitamin A totally depleted