








UNDERSTANDING DEWSII APPROACH TO DRY EYE DISEASE  
IDENTIFICATION

(PEER DISCUSSION)

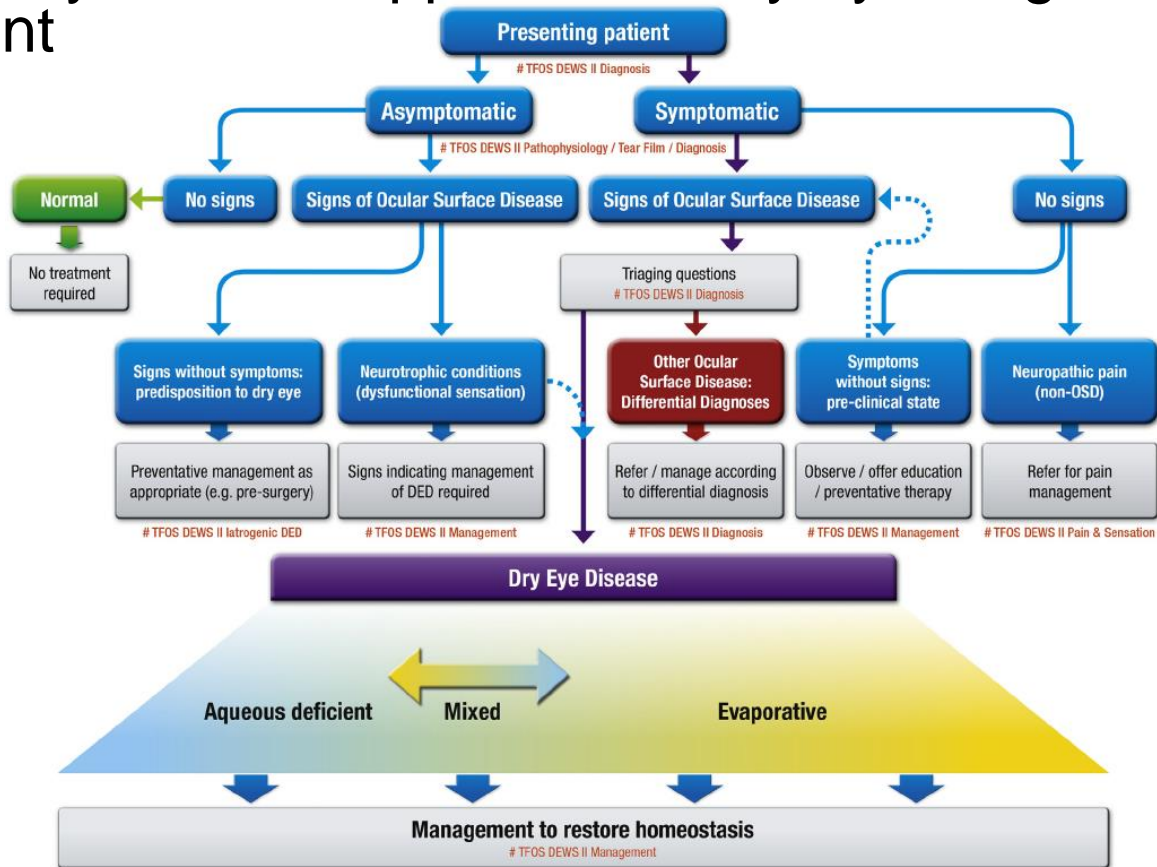
# Competencies

<b>Target Group</b>	Optometrist, Contact Lens Optician
<b>Competencies covered</b>	<b>Optometrist</b>  OCULAR EXAMINATION  OCULAR DISEASE  STANDARDS OF PRACTICE <b>Contact Lens Optician</b>  OCULAR EXAMINATION  STANDARDS OF PRACTICE
<b>Learning Objectives</b>	<p><b>3.1.7 To consider and understand the different diagnostic tests proposed in the DEWSII approach to dry eye disease diagnosis and management, with a view to delegate using these most appropriately/accurately within their practice</b></p> <p><b>3.2.4 To consider and understand the different diagnostic tests proposed in the DEWSII approach to dry eye disease diagnosis and management, with a view to delegate using these most appropriately/accurately within their practice</b></p> <p><b>6.1.3 Using the DEWSII approach to dry eye disease identification and management the delegate will be able to adopt this approach into their own dry eye management routine</b></p> <p><b>2.7.5 Using the DEWSII approach to dry eye disease identification and management the delegate will be able to adopt this approach into their own dry eye management routine</b></p> <p><b>2.7.5 Using the DEWSII approach to dry eye disease identification and management the delegate will be able to adopt this approach into their own dry eye management routine</b></p>
<b>Number of CET points</b>	3

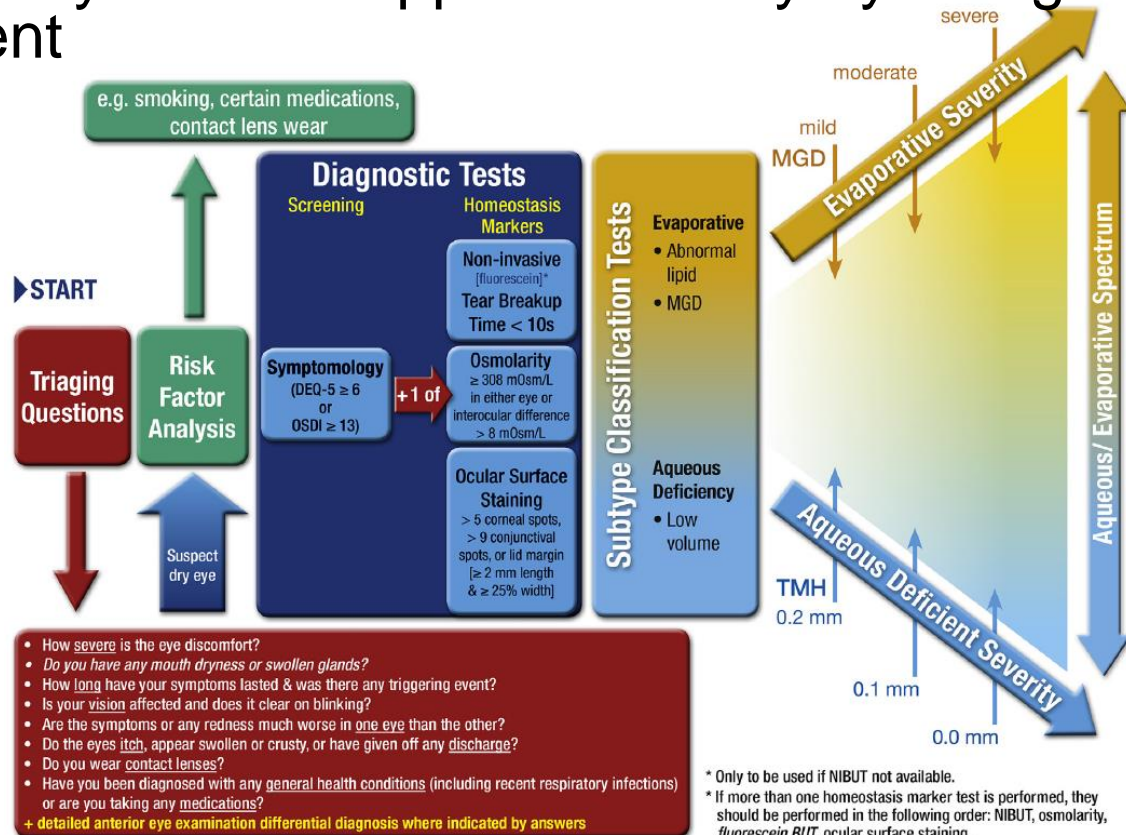


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# DEWSII – a systematic approach to dry eye diagnosis and management



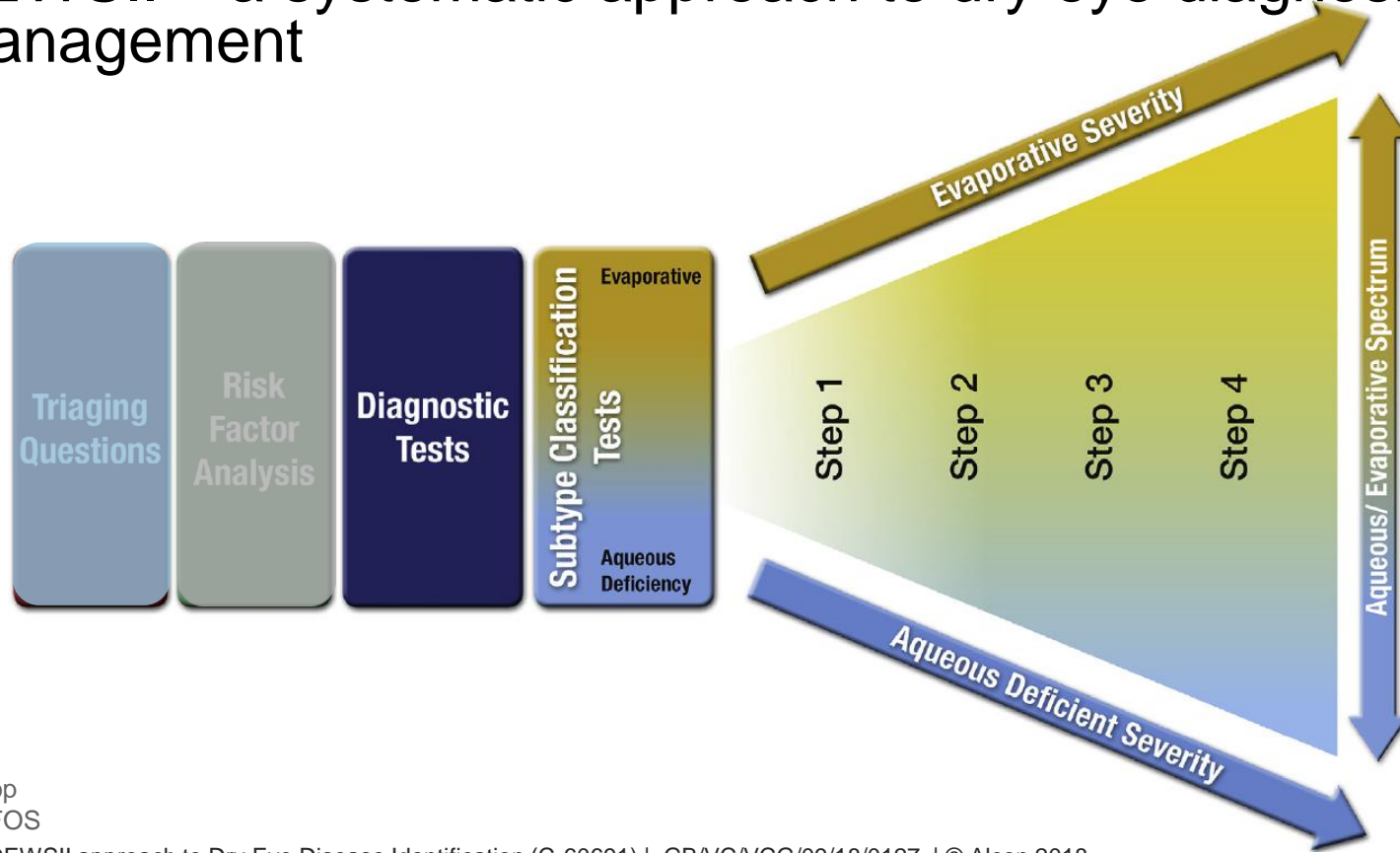
# DEWSII – a systematic approach to dry eye diagnosis and management



\* Only to be used if NIBUT not available.

\* If more than one homeostasis marker test is performed, they should be performed in the following order: NIBUT, osmolarity, fluorescein BUT, ocular surface staining.

# DEWSII – a systematic approach to dry eye diagnosis and management



Dry Eye  
Workshop  
2017, TFOS

# Exercise 1

## Review the definition of dry eye

### DEWSI Definition (2007)

“Dry eye is a multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance, and tear film instability with potential damage to the ocular surface. It is accompanied by increased osmolarity of the tear film and inflammation of the ocular surface.”

### DEWSII Definition (2017)

“Dry eye is a multifactorial disease of the ocular surface characterised by a loss of homeostasis of the tear film, and accompanied by ocular symptoms, in which tear film instability and hyperosmolarity, ocular surface inflammation and damage, and neurosensory abnormalities play etiological roles.”

# Exercise 2

## Diagnostic tests – screening questionnaires

### Dry Eye Questionnaire (DEQ-5)

DEQ 5

1. Questions about **EYE DISCOMFORT**:
- a. During a typical day in the past month, **how often** did your eyes feel discomfort?
- 0 Never
  - 1 Rarely
  - 2 Sometimes
  - 3 Frequently
  - 4 Constantly

b. When your eyes felt discomfort, **how intense was this feeling of discomfort** at the end of the day within two hours of going to bed?

Never <u>have it</u>	Not at All <u>Intense</u>				Very <u>Intense</u>
0	1	2	3	4	5

2. Questions about **EYE DRYNESS**:
- a. During a typical day in the past month, **how often** did your eyes feel dry?
- 0 Never
  - 1 Rarely
  - 2 Sometimes
  - 3 Frequently
  - 4 Constantly

b. When your eyes felt dry, **how intense was this feeling of dryness** at the end of the day, within two hours of going to bed?

Never <u>have it</u>	Not at All <u>Intense</u>				Very <u>Intense</u>
0	1	2	3	4	5

3. Question about **WATERY EYES**:
- During a typical day in the past month, **how often** did your eyes look or feel excessively watery?
- 0 Never
  - 1 Rarely
  - 2 Sometimes
  - 3 Frequently
  - 4 Constantly

Score:  $1a + 1b + 2a + 2b + 3 = \text{Total}$

+ + + + +

DEQ-5,  
Chalmers et  
al, Indiana  
University

### Ocular Surface Disease Index (OSDI-12)

#### Ocular Surface Disease Index<sup>®</sup> (OSDI<sup>®</sup>)

Ask your patients the following 12 questions, and circle the number in the box that best represents each answer. Then, fill the last boxes to calculate the final score.

Have you experienced any of the following <u>during the last week</u> ?	All of the time	Most of the time	Half of the time	Some of the time	None of the time
1. Eyes that are sensitive to light? .....	4	3	2	1	0
2. Eyes that feel gritty? .....	4	3	2	1	0
3. Painful or sore eyes? .....	4	3	2	1	0
4. Blurred vision? .....	4	3	2	1	0
5. Poor vision? .....	4	3	2	1	0

Subtotal score for answers 1 to 5

Have problems with your eyes limited you in performing any of the following <u>during the last week</u> ?	All of the time	Most of the time	Half of the time	Some of the time	None of the time	N/A
6. Reading? .....	4	3	2	1	0	N/A
7. Driving at night? .....	4	3	2	1	0	N/A
8. Working with a computer or bank machine (ATM)? .....	4	3	2	1	0	N/A
9. Watching TV? .....	4	3	2	1	0	N/A

Subtotal score for answers 6 to 9

Have your eyes felt uncomfortable in any of the following situations <u>during the last week</u> ?	All of the time	Most of the time	Half of the time	Some of the time	None of the time	N/A
10. Windy conditions? .....	4	3	2	1	0	N/A
11. Places or areas with low humidity (very dry)? .....	4	3	2	1	0	N/A
12. Areas that are air conditioned? .....	4	3	2	1	0	N/A

Subtotal score for answers 10 to 12

Sum of scores for all questions answered	<input type="text"/>
Total number of questions answered (do not include questions answered N/A)	<input type="text"/>

OSDI =  $\frac{\text{(sum of scores)} \times 25}{\text{\# of questions answered}}$

Outcomes  
Research  
Group,  
Allergan





# Exercise 3

## Diagnostic tests – Homeostasis markers

Non-invasive  
TBUT

Osmolarity

Ocular surface  
staining

# Exercise 4

## Classification and Management

