## PD ISO/TR 20498-5:2019



**BSI Standards Publication** 

# Traditional Chinese medicine — Computerized tongue image analysis system

Part 5: Method of acquisition and expression of tongue colour and tongue coating colour



#### National foreword

This Published Document is the UK implementation of ISO/TR 20498-5:2019.

The UK participation in its preparation was entrusted to Technical Committee CH/100/1, Traditional Chinese Medicine.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ISBN 978 0 539 01121 0

ICS 11.040.99

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This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 January 2019.

#### Amendments/corrigenda issued since publication

Date 7

Text affected

## TECHNICAL REPORT



First edition 2019-01-16

## Traditional Chinese medicine — Computerized tongue image analysis system —

## Part 5: Method of acquisition and expression of tongue colour and tongue coating colour

*Médecine traditionnelle chinoise — Système d'analyse d'images numérisées de la langue —* 

Partie 5: Méthode d'acquistion et expression de la couleur de la langue et du revêtement de la langue



Reference number ISO/TR 20498-5:2019(E)



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#### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <u>www.iso.</u> <u>org/iso/foreword.html</u>.

This document was prepared by Technical Committee ISO/TC 249, *Traditional Chinese medicine*.

A list of all the parts in the ISO 20498 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

#### Introduction

As one of the most distinctive traditional Chinese medicine diagnosis methods, tongue diagnosis is a method of inspecting the patient's tongue and its coating to determine his or her disease or syndrome. With growing global demand for traditional Chinese medicine, there is an increasing demand for international medicine and academic exchanges on tongue diagnosis as well as tongue-related devices. Traditional tongue diagnosis, mainly dependent on the practitioner's visual observation and text description, often varies with the practitioner's experience, environmental changes and other factors, which makes it difficult to make an accurate diagnosis and archive the tongue image. Therefore, it is necessary to quantify and digitize the tongue manifestation.

With modern scientific knowledge and technology, the practitioner's subjective judgement about tongue manifestation has gradually developed into an objective determination by computerized tongue image analysis system (CTIS) with a standard calculation method. According to statistics, more and more traditional Chinese medicine practitioners have come into contact with and used a device for tongue diagnosis, which undoubtedly plays a leading role in the promotion of tongue-related products worldwide. Thus, it is of the utmost urgency to standardize the CTIS, which will bring benefits to companies involved in the trade of tongue-related devices and to people assisting with CTIS.

Therefore, as one of the five parts of the ISO 20498 series, this document intends to quantify and digitize the tongue manifestation used in the CTIS, which is of great importance to the international trade and service of CTIS, thus increasing business profit.

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## Traditional Chinese medicine — Computerized tongue image analysis system —

#### Part 5: Method of acquisition and expression of tongue colour and tongue coating colour

#### 1 Scope

This document describes a method of acquisition of tongue image and expression of tongue colour and coating colour by computerized tongue image analysis system (CTIS).

This document does not cover the clinical tongue diagnosis result.

#### 2 Normative references

There are no normative references in this document.

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### **3.1 tongue body** muscles and vessels of the tongue

3.2 tongue coating

layer of fur-like substance stuck on the tongue

**3.3** tongue colour colour of the tongue body

**3.4** coating colour colour of the tongue coating

**3.5 tongue image** digital image acquired by the device