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# Follow-up after gastrectomy for cancer. The Charter Scaligero Consensus Conference

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All the Authors partecipated in the Consensus Conference. D'Ugo, Kodera, Baiocchi and Marrelli were the chairmen. Morgagni firstly conceived the idea of the Consensus Conference. De Manzoni and Roviello were the President and the Secretary of the 10 IGCC. Coit revised the statements, Hardwick checked the English style of the paper

#### Conflict of interest statements

The Authors declare no conflict of interest regarding the content of this paper

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#### Abstract

**PURPOSE**—At present, there is no scientific evidence supporting any definite role for follow-up after gastrectomy for cancer, and clinical practices are quite different across the globe. The aim of this Consensus Conference is to present an ideal prototype of follow-up after gastrectomy for cancer, based on shared experiences and taking into account the need both to rationalize the diagnostic course without losing the possibility of detecting local recurrence at a potentially curable stage.

**METHODS**—On June 19th-22nd 2013 in Verona (Italy), during the 10th International Congress of the International Gastric Cancer Association, a Consensus Meeting has been held, concluding a 6 months lasting, web-based, Consensus Conference entitled "*Rationale of oncological follow-up after gastrectomy for cancer*".

**RESULTS**—A total of 48 experts, with a geographical distribution reflecting different health cultures worldwide, participated in the Consensus Conference, and 39 attended the Consensus Meeting. Six statements were finally approved, displayed in plenary session and undersigned by the vast majority of the 10IGCC participants. These statements are actually attached as an ANNEX to the CHARTER SCALIGERO on GASTRIC CANCER.

**CONCLUSION**—After gastrectomy for cancer, oncological follow-up should be offered to patients; it should be tailored to the stage of the disease, mainly based upon cross-sectional imaging, and discontinued after 5 years.

#### Miniabstract

The practice of follow-up after gastrectomy has not an homogenous application worldwide. This paper presents the statements approved during the Consensus Meeting held in Verona during the 10IGCC (June 2013).

## Keywords

gastric cancer; follow-up; surgery; cross-sectional imaging; upper GI endoscopy; prognosis; chemotherapy; tumor markers

## Introduction

The Charter Scaligero on Gastric Cancer (see the Accessory Table) has been developed by a panel of international experts that, after a Delphi Technique exercise lasting several months, finally gathered at a Consensus Conference Meeting in Verona (Italy) on June 22 2013 during the 10th International Gastric Cancer Congress. The aim of the Charter is to lay the foundations for articulating a common universal vision, implementing global standards of effectiveness and efficiency in the struggle against the effects of gastric cancer, with the ultimate scope of ameliorating the quality of life of people affected by the disease.

One of the main debated points in the clinical path of patients with gastric cancer concerns the practice of follow-up after gastrectomy. Many retrospective series have demonstrated that diagnosing tumour recurrence in the asymptomatic phase does not resulted in an improved survival. However, clinical practice guidelines in many high volume centres submit patients to regular clinical and instrumental postoperative checks with the aim of minimizing the nutritional sequelae of gastrectomy and the timely diagnoses of tumour

recurrence. High-grade evidence upon this topic is unlikely to be achieved by RCTs, thus the maximum evidence we could deal with would be reached by a Consensus of experts.

Therefore, one out of 15 articles of the Charter Scaligero on Gastric Cancer has been devoted to "Rationale and Limits of Oncological Follow-up after Gastrectomy for Cancer".

# Methodology

- **1.** Appointment of a Restricted Working Group by IGCC Scientific Committee (*Dec 1st 2012*)
- **2.** Production of a preliminary document by the Restricted Working Group, enlightening the main relevant data in the literature and the unsolved clinical issues, presented in form of 7 working questions (*January 20<sup>th</sup> 2013*) (Tab. 1)
- **3.** Restricted Working Group suggestion to the IGCC Scientific Committee of a list of names as invited experts in an "Enlarged Working Group" (*March 15<sup>th</sup> 2013*)
- **4.** Enlarged Working Group members confirmed their participation and acceptance of the rules of the web-based Consensus Conference (*April 15<sup>th</sup> 2013*) (Table 2)
- **5.** Through the Delphi Method any member of the Enlarged Working Group has blindly answered the working questions and reviewed the statements issued by the Restricted Working Group (*June 4<sup>th</sup> 2013*).
- 6. The Charter Scaligero on Gastric Cancer, including the Annex to the Article 13, entitled "Rationale and Limits of Oncological Follow-up after Gastrectomy for Cancer" and composed by 6 statements (the panel approved the merger of working questions 4 and 5 in a single statement), was reviewed in a reserved workshop held during the Congress by the representative panel of specialists who participated in the exercise for formal endorsement (June the 21<sup>st</sup> 2013), and it was thereafter presented and displayed for open discussion during the Congress Consensus Conference. All the participants to the 10IGCC were allowed to undersign the document (June the 22<sup>nd</sup> 2013).

# Working questions and approved Statements

Question 1: Should the patients be completely lost after radical surgery and eventual adjuvant chemotherapy?

## Statement #1

There is no evidence that routine followup after curative treatment of gastric cancer (R0 resection with or without adjuvant therapy) is associated with improved long term survival. However, routine followup should be offered to all patients for the following reasons: oncological (detection and management of cancer recurrence), gastroenterologic (endoscopic surveillance and management of postgastrectomy symptoms), research (collection of data on treatment toxicity, time to and site of recurrence, survival, and cost benefit analyses), and pastoral (psychological and emotional support). Followup should

include lifetime monitoring of the nutritional sequelae of gastrectomy, including, but not limited to, adequate vitamin B12, iron, and calcium replacement.

Question 2: Should follow-up be done exclusively by GP instead of surgeon, oncologist, gastroenterologist?

#### Statement #2

Followup should be offered by members of the multidisciplinary team who managed the initial diagnosis, staging and treatment, including the gastroenterologist, the surgeon, the medical and radiation oncologists, and the general practitioner.

Question 3: Should follow-up be differentiated on the basis of recurrence risk?

## Statement #3

Followup of patients following curative treatment of gastric cancer should be tailored to the individual patient, to the stage of their disease, and to the treatment options available in the event that recurrence is detected.

Question 4: Should only clinical checks be done during follow-up?

Question 5: Should advanced imaging techniques be regularly prescribed during follow-up?

#### Statement #4

Physical examination rarely detects asymptomatic recurrence of gastric cancer. A followup program intended to detect asymptomatic recurrence should be based on cross-sectional imaging. There is no evidence that intensive cross-sectional imaging surveillance of gastric patients is associated with improved long term survival. However, as a matter of clinical care following curative treatment of gastric cancer, it is reasonable to prescribe periodic imaging at a frequency consistent with recurrence risk. The incremental value of screening for elevated biochemical markers in addition to cross-sectional imaging remains undefined.

Question 6: Should upper GI endoscopy be regularly prescribed during follow-up?

## Statement #5

Upper GI endoscopy may be used to detect local recurrence or metachronous primary gastric cancer in patients that have undergone a sub-total gastrectomy. True local recurrence is uncommon, but if present may be considered for resection with curative intent, especially in patients who initially presented with early stage disease. The cost-benefit ratio of endoscopic surveillance of the anastomosis and/or gastric remnant remains undefined.

Question 7: After how many years follow-up should be stopped?

## Statement #6

Routine screening for asymptomatic recurrence of gastric cancer may be discontinued after five years, as recurrence beyond that interval is very rare.

## **DISCUSSION**

Tumour recurrence after curative therapy of gastric cancer is unfortunately common and the great majority of cases are incurable. Performing regular postoperative instrumental checks is of unproven value. However, high volume cancer centers usually offer their patients some form of regular follow-up after radical therapy. The rationale for this is three fold; to manage the quality of life and nutritional aspects of gastrectomy, to provide pastoral support for the patient and their family, and to conduct audit/research. The effects of gastrectomy for patients are both predictable (ie weight loss) and unpredictable (ie dumping). It is therefore imperative that they are seen regularly during the first year after surgery to provide support and advice, particularly regarding nutrition. At present, there is little a clinician can offer a patient with recurrent gastric cancer except palliative chemotherapy. In the near future, biomedical research will hopefully provide therapeutic weapons for metastatic and/or relapsing patients. All clinical teams have an obligation to monitor their outcomes with the aim of improving standards and this process relies upon the routine audit of outcomes. All these aspects of a high quality service require patients to be offered regular and timely access to the specialist multi-disciplinary team.

The present paper presents the results of an international Consensus of experts lasting several months on a web-based program and finally concluded in a reserved open-discussion session during the 10<sup>th</sup> IGCC held in Verona in June 2013. The board of experts recognized that follow-up is good clinical practice and should to be offered to all patients for the reasons already mentioned. Follow-up should be individualized and appropriate to the patient and the healthcare setting (ie video-linking may be the easiest way to contact patients who live remote from their Hospital). Follow-up should consist of clinical review, cross-sectional imaging +/- upper GI endoscopy, and should be discontinued after 5 years.

The statements of this Consensus of Experts are included in the Charter Scaligero as an annex to the article 13 ("The role of the "follow up" in the management of Gastric Cancer"), which states: "The appropriate management of the disease is fundamental not only for improving the patients' quality of life but also in order to decrease unnecessary costs for the health systems. A panel of experts who participated in the 10<sup>th</sup> IGCC have elaborated a vision and reached a consensus on a number of statements that are intended as a guide of principles that would be of help to better manage the follow up of the disease after surgery. The Institutions and Professionals who endorsed this Charter and the "statements on the follow up" commit themselves to implement methodologies that will be reviewed, on the bases of evidence, in future congresses with the scope to come in the future to common approaches".

The CHARTER SCALIGERO on GASTRIC CANCER is currently being promoted to the Cultural, Political and Administrative Institutions dealing with health worldwide.

The CHARTER is expected to be re-evaluated every two years.

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# Table 1

Working Questions	
1)	Should the patients be completely lost after radical surgery and eventual adjuvant chemotherapy?
2)	Should follow-up be done exclusively by GP instead of surgeon, oncologist, gastroenterologist?
3)	Should follow-up be differentiated on the basis of recurrence risk?
4)	Should only clinical checks be done during follow-up?
5)	Should advanced imaging techniques be regularly prescribed during follow-up?
6)	Should upper GI endoscopy be regularly prescribed during follow-up?
7)	After how many years follow-up should be stopped?

## Table 2

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